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EDWARD ALLEN FAY,

UNDER THE DIRECTION OF

E. M. GALLAUDET, OF WASHINGTON, I. L. PEET, OF NEW YORK, HARRIET B. ROGERS, OF MASSACHUSETTS, P. G. GILLETT, OF ILLINOIS, AND J. L. NOYES, OF MINNESOTA,

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[*Continued on page 3 of cover.*]

Yrs truly,
Thomas H. Gallaudet

AMERICAN ANNALS

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THE BIBLE AS A TEXT-BOOK IN EARLY RELIGIOUS INSTRUCTION.

THE need of moral teachings, direct, simple, and long continued, is one deeply felt by those on whom, in our institutions, depends the mental and physical well-being of many children. Simply as children, in the most impressible years of life, rapidly forming those habits of thought and action which will shape all after life, such teaching would seem to be demanded for them by the mere urgency of their case. As deaf children their need is yet more pressing.

Shut out by their misfortune from the conversation of those with whom their lives have been spent, the little ones we gather to us in our schools have missed a whole education. From the discussions, comments, and expressions of opinion which they hear about them, other children learn marvellously young the ordinary standards of society and rules of conduct. From the language of emotion and of reason, whose suggestions entice the active mind on every side into daily widening fields of intelligent thought, other children begin in mere infancy to reflect and imagine—to grasp abstract ideas and take cognizance of truths and laws. But from the deaf child that powerful stimulus to the mental faculties which comes from continual communication with other minds has been practically cut off. The best means of intellectual development has been wanting, and intellectual growth has been correspondingly feeble and stunted. To feed the hungry understanding, to widen on every side the range of mental vision, to give life in its thousand relations a true meaning and value, this, and this alone, can restore to their rightful heritage those whose birthright is a share not alone in

the sorrows, but also in the joys and hopes of our common humanity.

To say that moral development should from the first go hand-in-hand with intellectual progress is scarcely enough, even from a non-religious point of view. How dependent intellectual progress is upon moral development we are continually realizing afresh—even, sometimes, with a sort of surprise. How impossible is it to secure satisfactory results from pupils who make no earnest, faithful effort on their own part. How needful, in all departments of work, are habits of obedience, honesty, and truthfulness; uprightness of purpose, knowledge of the duty of man to man. How surely does refusal to purchase knowledge, at the cost of present sacrifice, limit attainment. "He learns because he is *good*," I heard a teacher say, the other day, of a lad whose sweet, teachable disposition and thorough, faithful work had placed him at the head of a class where there were children with better minds and greater natural ability than he.

We need not dwell on this point. We scarcely need to say that beyond it lies a deeper and more solemn word for those of us who find the great help of our own troubled, imperfect lives in the belief of an eternal goodness enfolding and upholding and caring for them all. If our little ones may know a Heavenly Father's love, and learn to trust His goodness and to do His will —if "the joy of the Lord" may be their "strength," and the hope of immortality their "great and endless comfort"—then the golden key of all life is within their reach, and to place it in their hands, and teach its use, is to open to them an inexhaustible supply for life's deepest wants and needs.

In religious instruction it has always been a matter of regret that, to pupils who never learned language through hearing, Bible-reading, without explanation, remains long so difficult a thing. The causes which operate to make it so are, of course, only the same in general which make extended reading in any direction the most difficult thing in the world for deaf-mutes: limited knowledge of language and of history, lack of general information, and very limited personal experience. In Bible-reading, however, the ordinary difficulty is much increased by the unusual forms of the solemn style, and by the peculiarities of its figurative language, through which the customs, history, and even the geography of ancient Jewish life have been transmitted into the spiritual nomenclature of Christendom. Still more, also, does the lack of a wide

and conscious experience in the spiritual life with which the Bible deals militate against an understanding of its words. The more deep and real does this become, the more vivid and natural grows language born of life; and though this is no more true for the deaf than for any other students of the Bible, and though the fact it indicates—that the end of all Bible teaching should be moral development—is so patent as to seem the merest commonplace, still the peculiar difficulties of the deaf child remain, and from them the fact that too many pupils leave their institution course unable to read the Bible with sufficient freedom to find in it either much practical help or any strong incentive to independent study. What, then, can be done more than has already been done in this direction?

The special difficulties of which we have just spoken naturally suggest two things for our consideration in answer to such a question: A more special study of Bible language, as such, and a higher education of the moral perceptions.

If we sum up briefly the common methods of religious instruction, after direct statement of truths, narrative is probably most prominent among them; and through it the story of the Bible, and its bearing upon religious belief, become familiar to the pupil. Texts and selected passages are explained and learned; and, later, connected passages, following given lines of thought, are studied. But, while for a knowledge of ***Bible teachings*** such a general course may be quite sufficient, it is not alone sufficient to make the ***Bible itself*** an open book. In fact, does it not rather tend to substitute books of "Bible stories" and simple paraphrase for the direct use of the Scriptures, which seem strange and unfamiliar by contrast? A fair knowledge of many an abstruse subject may be gained by ordinary readers, for example, through popular articles, which still leave the technical works from which they were derived practically useless to those not prepared for them by special study. Such general knowledge is all that teachers of deaf-mutes attempt to give their pupils on various subjects, and all that it would be wise or practicable to attempt under the circumstances. But unique as is its position in literature and in history, as the ground of Christian faith and the one perfect rule of life, the Book of books merits what for its understanding it demands—an especial study of its words, and that direct and constant use which alone can make any volume a familiar companion.

In the belief of the writer this language-study may be profitably carried on hand-in-hand with other religious instruction, and begun long before the little pupil is capable of understanding anything so complicated as narrative in Scripture language.

Interesting, too, as such study is from any point of view, will not a peculiar charm attach to it if it may be made the especial instrument for carrying on that progressive education in abstract morals which we have said must be co-ordinate with all other growth, if uniform development is to be hoped for?

Truths, like words, are learned by frequent repetition, in connection with other things already familiar, and in a variety of applications. But in different applications those delicate distinctions and shades of meaning arise which the growing intelligence recognizes and strives to express; so the perception of truth calls language into being, and the study of language may be readily turned into a means of quickening and educating the perception of truth.

Under the influence of thoughts like these, an experiment was tried last year at the Clarke Institution with the object of determining how early the Bible might profitably be used in religious instruction, and how far it might be possible to hold the interest of young classes in lessons dealing chiefly with abstract truths.

In place of the written lessons and simple text-books ordinarily used, Bibles were given to Primary children in three classes, representing the second, third, and fourth year's work, and containing thirty-two pupils. The same course of study was followed with all, much amplified, of course, in each older grade. That only of the youngest will be specified here, however, the writer hoping that others as well as herself may be interested to know what could be accomplished in such work by such a class. It contained those pupils who had been one year in school, with some others who had dropped back. Of its eleven children, one had sufficient hearing to learn considerable imperfect speech before entering school, and one, wholly deaf from birth, had been taught to write several words and sentences at home. No others had any previous advantage of language or instruction, and several were under ten years of age. They had the ordinary vocabulary of young classes and had received the simple religious instruction given during the first year in school. All lessons were, of course, carried on through the medium of speech and speech-reading, every im-

portant thing being also written before any subject was dismissed. Such were the little ones in whose outstretched hands were now placed these new treasures—Bibles of clear type and convenient size, strongly bound in leather. It was with a thrill of keen pleasure that their teacher met the eager faces upturned to hers on the sunny Sabbath afternoon of the first lesson.

Wisely utilizing that instinct of possession which turns its prize over and over and scans it within and without, she devoted two Sunday lessons (which were supplemented by work in daily devotions during the intervening week) to the consideration of the most notable features of the volume itself. Title and title-page were discussed, and important words defined and pronounced. The children learned to turn instantly to Old Testament or New, and to tell in simple language something of what was to be found in each. That the "books" might be understood, the teacher bade them turn the leaves bearing a given title (first observing the same title in the table, that spelling and position might be clear in mind) till all were gathered up, and to separate them from the rest of the volume by slips of paper at the beginning and end. Competition ran high; the children were not content until the whole Bible had thus been separated into books, and, running races with each other for speed and accuracy, the work was quickly done. In the end, they had not only all the understanding of what was meant by "books" needed for use in study, but many names and their relative position in the volume remained in mind. Let me add that at the close of the year any reference given by the teacher could be readily found by her little pupils—rapidly found, if they were told whether the book in question was in the Old Testament or the New. Of the books, they also learned how they were written long ago by good men, helped of God; the names of some of these writers were also learned. With this and other such general knowledge of its character, very simple, but not, perhaps, very unlike that of other children of their age, their study of the book was begun.

The plan of work proposed was as follows: A phrase or sentence was to be chosen, which, without undue violence to its direct connection, might be used to express a practical truth; (occasionally an important word was also taken.) This having been carefully studied on Sunday, was to be used in different connections during daily devotions the following week, in passages from all parts of Scripture, but as far as possible only in con-

nection with words and constructions already familiar. The subject of each new passage was to be the topic of thought for the day, and the variety of applications was relied upon to widen the pupil's idea of the truth in point, while the interest of such a succession of fresh thoughts should so subordinate the language in point as to make him unconscious of the actual amount of repetition by which it was being ingrained into his understanding. The book of Psalms was selected as containing the greatest number of passages suitable for use as detached statements; and while it must be confessed that the exact meaning of its connection was not given the first one chosen, it may safely be said that it was the only one wrested even so far from its connection, while, later, the way was prepared to return to it for its fuller meaning.

Let me borrow, then, from note-books of teacher and pupil, some particulars of a lesson which was of exceeding interest to our little class. In the teacher's notes I find the following outline of preliminary work:

Write on wall-slate, *Psalms.*

Children observe position of name in table, then find book in Bibles.

Teach pronunciation. (Psalms)

Teach abbreviation. (Ps. ~~Psalms~~)

Show divisions till children readily point at *a psalm* anywhere, recognizing it as a section.

Show Roman letters—division into verses—numbers of verses. Children point to *verse* 1, *verse* 5, etc.

Give reference for children to find:

"The Lord knoweth—." Ps. i, 6.

Define, The Lord = { God / or / Jesus.

Is the book of Psalms in the Old Test. or New?

Is the story of Jesus in the Old Test.?

Then, in Old Test., will Lord = Jesus?

In the O. T., Lord = God.

Define:

v ——{th / eth = v ——s

knoweth = knows.

loveth =

looketh =

hath =

etc.

(till children readily change termination.)

The Lord = God.
knoweth = knows.
The Lord knoweth = God knows.

These simple definitions were given and learned, the children repeating or answering aloud, as the case might be, and some child afterward writing so that all was left clear to the eye upon a wall-slate. Then, fixing the attention of the little group around her, the teacher said earnestly, "The Lord knoweth—*what?* What does God know?" They hesitated for an answer, and she asked, still holding their intent gaze, "Are there some things the Lord does *not* know?" Quick and clear the answer came, "No! No!" and from one child the emphatic words for which the teacher hoped, "God knows *all!*" "Yes, all; all things; everything. There is nothing God does not know." Now once more the question:

"What does God know?"

"Everything."

"We will think of some of the things God knows. We cannot tell them all—what shall be first?" Again the little ones hesitated, and again a leading question drew them on. "Can *people* make the sun shine?" No need of further prompting! The children grew wild with delight and wonder, as thought crowded upon speech and sentence after sentence was shouted out, till slate after slate was filled something in this way:

The Lord knoweth (God) (knows) - - -
- how to make the sun shine.
- " " " " moon and stars shine.
- " " " " wind blow.
- " " " " pretty clouds.
- " " " " rain fall.
- " " " " snow fall.
- " " " " grass grow.
- " " " " flowers grow.
- " " " " trees grow.
- " " " " children grow.

etc., etc.

As the list, which was purposely allowed to be a long one, went on and on, there grew a sense of awe. "Many, many things." "God knows more than all the people!" said our little ones over and over to each other. A deep impression was made by some of the teacher's suggestions. "What is your mother doing now? You cannot see; you do not know! *God knows!* What is your father doing? where is he? *God knows!* Will it be pleasant or stormy to-morrow? *God*

knows! Shall you be alive next year? *God knows!*" Little faces paled and breath came quick, as little souls struggled with their first wide thought of omniscience. Even at the end of the year, these things from their first Bible lesson were found clear and vivid in mind, deepened by impressions of the following week. "The Lord knoweth *the thoughts* of men." "He knoweth what is *in the darkness!*" Deep, awful thoughts of reverence and fear came with such words.

In the second Psalm, "Serve the Lord" being selected, and translated as $\left.\begin{matrix}\text{Obey}\\\text{Work for}\end{matrix}\right\}$ God, the Bibles were searched for those commands which all who serve Him must obey.

"Thou shalt love the Lord thy God;" "Love one another;" "Children, obey your parents;" "Lie not;" "Speak .... the truth;" "Thou shalt not steal;" "Thou shalt not kill;" "Pray to thy Father;" these and many more became familiar words. In Ps. iii, verse 4 furnished a long lesson on prayer; verse 5 brought thoughts of great sweetness to timid little hearts. And so the lessons went on; very simple they were—simple enough to show what plain and tender messages lie ready for God's very little ones in His word.

The passages of Scripture studied in Sunday lessons were underlined in each child's Bible, and, as far as practicable, those also which were taken up during the week. A congenitally deaf child, eight years old, who entered school the year before, counted eighty-seven such marked passages in her Bible the Sunday before she went home, and these were not all which had been carefully studied and learned. The two older classes had done much more.

The children's interest was unflagging throughout the year. Bibles were begged for, (especially by the older Primary boys,) for play-room use on Sunday afternoons and holidays, and brought afterward to teachers, that verses which the little owners had found and understood by themselves might be marked. Said the matron of the Institution, one day, in the hearing of the writer, "No one can give these boys a greater pleasure than to spend an hour with them in the play-room with their Bibles."

It is but a beginning; but a beginning which seems full of hope and promise to those who have watched this work. The gain in freedom and breadth of thought which was made during the year was pleasant to see. The difficulty of the work

was steadily increased, and in preparing for another year's study, we find, with delight, whole connected passages ready for use, with no need of explanation, through the language already taught, and a bridge well laid across the chasm between literal and figurative language ready for our little learners.

It scarcely seems possible that, if such a course were steadily pursued through an entire period of study, Bibles thus used and marked in every part could ever after seem strange books to their possessors, or fail to bring back, with the mere sight of their words, a thousand helpful lessons. Surely, also, the study of Scripture narrative, and all the more advanced lessons of an institution course, must be very different to children accustomed, from their earliest years in school, to the free and constant use of The Book.

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ABOUT TEACHING GEOGRAPHY.

Educators of deaf-mutes, however widely they may differ on questions of method in teaching, agree unanimously on this point—that a command of the language of the community in which the pupils live is the great object to be aimed at in their training, and that the acquisition of general knowledge ought to be made quite subordinate to that end.

Still, we cannot accept as satisfactory a scheme of education which contemplates the discharge of the average pupil, at the end of his term of instruction, in a state of complete ignorance as to some of the branches generally regarded as requisites of even a primary course. Among these branches, (reading and writing being taken for granted,) the first place, by common consent, belongs to arithmetic. This study has received from instructors of the deaf the attention which it deserves, and discussions of the best methods of arithmetical teaching, in which the subject has often been handled with marked ability, have taken their share of space in the pages of the *Annals.*

Next in importance to arithmetic, (and I grant that it comes "next by a long interval,") is the study of geography, and this branch seems hardly to have received as much thought as its value would justify.

The problem for our solution in regard to this study is:

How can our pupils acquire such a knowledge of geographical facts as every person ought to possess, without, in the meantime, losing opportunities for progress in the comprehension and use of language?

If, further, we can frame our course of study so that the pupil's power of reasoning, as well as his memory, shall be given exercise, the educational value of the work will be raised above the reach of cavil.

Now, it seems clear to the writer that by following the method usual in common schools, that of lessons memorized from a text-book, and recited either in the way of monologue, or by fragmentary question and answer, the result desired will not be reached. Either the unfortunate deaf-mute will overload his mental digestion with a mass of non-assimilable phraseology, or, if the teacher takes time to explain fully the meaning of the terms employed, and to unravel the difficulties of the syntax, the quantity of intellectual pabulum supplied will be too small to justify the outlay of time and strength. Clearly, the disadvantages under which our pupils labor must be taken into the account, and their teaching must be so planned as to avoid difficulties wherever possible, except when the surmounting of a difficulty will assist their future progress.

The teacher of deaf-mutes, more than other teachers, is compelled to ask himself, in regard to his work, How will this help my pupils in after-life? Is this method the most fruitful? And any study, or any method of pursuing a study, which cannot give a satisfactory account of itself, is a constant burden on his professional conscience.

In examining from this point of view the common methods of geographical teaching, it seems to be an obvious criticism that an excessive number of insignificant and unrelated facts are presented to the memory, while very little advantage is taken of the principle according to which facts associated by relations, such as that of cause and effect, may be grouped and held in mind with the minimum of mental effort.

In the older geographies each political division was treated as an isolated unit, and, under the several headings of soil, climate, vegetable productions, manufactures, etc., furnished its quota of barren vocables, painfully learned and expeditiously forgotten. Thus a scholar would read that Hesse Cassel had a climate rigorous in winter and warm in summer, and that its vegetable productions were wheat, rye, oats, barley, potatoes,

onions, and cabbage, and on the next page he would learn that Hesse Darmstadt enjoyed a climate cold in winter but mild in summer, and that it produced oats, rye, wheat, potatoes, barley, cabbage, and onions. Thanks to Bismarck and Cavour, the field for displaying this particular kind of ingenious stupidity has been greatly restricted, and from this point of view the work of unifying Germany and Italy receives a new and triumphant vindication.

The text-books now in use show a great advance over those of a generation ago in regard to breadth of treatment, yet, for purposes of primary instruction at least, they are, seemingly, too formal and lifeless.

Now, in justifying the study of geography as one which in after-life will repay the time spent upon it, we shall find, I think, that the prime value which a knowledge of geography has for us is that it gives us a key to the workings of commerce.

The degree of interest which we, and Americans generally, take in any foreign country is measured pretty accurately by the volume of our commerce with that country, and we find that extensive and long-continued commercial intercourse between two nations generally leaves its mark on the language, the literature, and the character of both. The Hebrew prophets, with a true insight into events, denounced the traffic with idolatrous Tyre and Egypt, as threatening the monotheism of Israel; Juvenal's complaint* of the debasing effects of contact with the East is one of his most quoted lines; and in later times the "Italicizing" of English manners and literature in the time of the Renaissance, and the "Hispaniolizing" which characterized a later period, were, no doubt, due in great measure to the course of English trade.

Moreover, the geographical conditions of a country, as its soil and climate, its physical conformation, the density of its population, and the character of its inhabitants,—all have a direct bearing on the nature of its internal and its foreign commerce, and on the channels through which that commerce flows. Commerce, then, in this view, is the thread on which geographical facts may most naturally, and with most interest to the pupil, be strung.

If this view is in any degree correct, the teacher of geography should make a study of the subject on lines quite different

* "Jam pridem Syrus in Tiberim defluxit Orontes."

from those laid down in the usual text-books. The facts may be gathered in part from these text-books, but largely also from Census Reports and Statistics of Commerce and Navigation, from the current newspapers and other periodicals, from books of travel, and from that most convenient and abundant storehouse for all except original workers—the Encyclopædia. The ideal teacher of geography would have a knowledge, at first hand, of geology, physics, ethnology, and (if I may coin a word) of *mercatology*, or of the articles which form the staples of the world's traffic and of the courses in which they move.

Instruction so highly specialized as this could best be given, of course, by a special teacher, and perhaps, in some of our larger institutions, it might be practicable to have instruction in this branch given in special classes.

In most of our institutions, however, the teaching of geography must be entrusted to the regular teachers, and must form a part of the class-room routine.

Having thus stated our views as to the value of the study, and having indicated a plan by which work in this field may be laid out, we return to the problem as enunciated in the early part of this paper, and ask whether deaf-mutes studying geography on this plan are likely to get a better knowledge of the subject than if the ordinary course is pursued; also, whether this plan favors the employment of methods such as instructors of deaf-mutes have found especially useful in teaching the use of language. Does it marshal the facts in such order that they may be easily retained and viewed in their relations? Does it involve the free use of the conversational style of language? Does it favor the copious use of illustrations—pictorial and other? Does it train the mind to act, as well as to receive?

Now, in teaching any branch of natural science, the subject should be so presented that the pupil may start with facts which he may verify by his own senses, thus obtaining a clear conception of a small field, which he can afterwards use as a measure of regions which lie beyond the reach of his own experience. Accordingly I would begin, in the school from which I write, in Trenton, N. J., with a city map taken from an old directory and conveniently mounted. Starting at the Institution, they readily learn the points of the compass and the scale of distances, and their experience soon teaches them, in terms of muscular fatigue, the meaning of the mile, the unit of measure. They locate the public buildings and the pot-

teries and iron mills, they trace out the course of the river, the canal, and the railroads, and see for themselves how every curve and angle with which they are familiar is reproduced on the paper.

The traffic which is carried on in the city streets brings under their eyes the produce of the surrounding country, the fuel, the raw materials, and the finished products of our factories, and building materials from the forest and from the quarry.

On a large map we can trace back the clay to the Perth Amboy banks, and the coal to Wilkesbarre or Scranton; we can follow our manufactured goods to the great centres of distribution, and thence to all parts of the country; we can measure distances and trace out the lines of communication.

Extending our view, we take in the great industrial centres of the East, the Appalachian mineral region, the cotton belt, and so on, always treating a section in relation to its intercourse with other sections. Our school museum, prepared at almost no expense except of time and thought, will furnish specimens of the grains, with preparations from them, the textile materials, the woods, etc., of our own country, together with the most common productions of other climates. Meanwhile, the use of the map for reference will give familiarity with names and distances, and map-drawing should be practised so far as to give the ability roughly to approximate, at least, the form and dimensions of the country studied.

The illustrated magazines and weekly papers will often furnish articles which bear on the subjects studied, and the pictures in these, at least, will be eagerly examined by all the pupils.

To illustrate how the theory I have outlined works in practice, I will give an example from my own experience.

In teaching my class in the New York Institution about the Northern Pacific Coast region, flax was spoken of as one of the productions. We had previously treated of the plant and its uses, and had seen that, to yield the finest fibre, it requires a cool, moist, equable climate. We saw that in Western Oregon the plant finds conditions similar to those which exist, for instance, in Ireland and in Belgium, and that therefore it thrives, while on the Atlantic seaboard it cannot be cultivated with profit.

The parallel between the Japan Current and the Gulf Stream was pointed out, and the dense forests of coniferous trees—

> —to equal which the tallest pine
> Hewn on Norwegian hills, to be the mast
> Of some great ammiral, were but a wand—

were referred to as caused by climatic conditions similar to those of Northeastern Europe.

The area of excessive precipitation and consequent luxuriant vegetation was shown to be sharply defined by the lofty mountain range parallel to the coast, and the reason was given, and it was noted that where flax grows best maize will not grow at all. Now, here was a pretty large group of facts which, taken together, give the student a fair idea of the agricultural capabilities of the region discussed and a view of principles which he can apply to other simlar facts as he shall learn them.

Yet in a lecture of less than half an hour all this was not only made so plain that the substance of it was correctly given the next day, but, as I afterwards found, the pupils had fixed in their minds and were able to use independently the relations of cause and effect which I have indicated.

As to the ways in which this plan can be carried out so as to give full and varied exercise in language, I think that in younger classes the teacher might, with advantage, prepare simple lessons, to be dictated and written out by the pupils; and here I may say that I am a strong believer in the views of Dr. I. L. Peet as to the great value of the method of dictation.

For older pupils this exercise might be exchanged for brief daily lectures given by dactylology or, where possible, orally —the substance only to be written out in the form of a composition.

I found an occasional copy of the New York *Journal of Commerce* a very useful and interesting guide. The reader will at once see how the arrival of a ship from (say) Pernambuco would suggest questions as to the distance, the average rate of progress, the winds, the nature of the cargo and its destination; and how the tanneries and shoe factories and sugar refineries, which the pupil knows by sight, (perhaps, also, by smell,) become linked in his mind with the strange and distant countries from which they draw their supplies.

It is true that, on such a system of teaching, a host of petty streams which neither turn mills nor float vessels will be ignored; perhaps some towns which have political or historical but no other interest may be overlooked, but I think that in

this way the facts which everybody wants to know may be most easily learned; that in learning these facts abundant and profitable linguistic practice is had; and that a grasp of principles is acquired which will enable the student to reason from the facts he learns in school to new facts afterwards gained, and to correlate these facts into a systematic whole.

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A METHOD OF INTRODUCTION TO THE STUDY OF GEOGRAPHY.

The *Annals* has frequently published articles bearing on methods of instruction in language, in history, and in arithmetic; but concerning geography, with a single exception, an unbroken silence has been maintained. And yet geography, if properly taught, stands among the most interesting and profitable of the common school branches of study, and, outside of deaf-mute instruction, has received its full share of attention in the general discussion of methods. I am aware of the fact that several of the so-called new methods recently introduced into schools for hearing children have been practised for years in schools for the deaf. And, farther, it is not supposed that there is any general ignorance in regard to the "new method" in geography. But a practical knowledge of the good there is in it, and to be derived from it, I believe to be unknown to many.

In geography, as in other studies, the rational method would seem to be the synthetical—proceeding from the particular and known to the general and unknown. While there may be a difference of opinion among writers as to the order in which different topics should follow one another, all are agreed as to the first step. The pupil should begin by the study of that part of the earth which is under his own observation, and therefore known to him. The location of most of the deaf-mute institutions renders this far more practicable than in many common schools, and renders also the use of the moulding-table unnecessary. Here then is the method: The class is to be led out to places convenient for observation, and there to be taught geographical terms as well as extent of surface. The points of the compass are to be learned; if near a river, the direction in which the stream flows, its right bank

and left bank, its north bank and south bank; the situation of places with respect to the river; island, peninsula, tributary, valley, etc. Of course the teacher will avoid confusion in the pupil's mind by giving, at each lesson, no more than the pupil can master. In the school-room the lesson should be reproduced by outline maps drawn by the pupils, they fitting the names which they have learned to their proper places on the map, and the teacher correcting and suggesting.

Preparatory to such work, the drawing of the plan of the school-room, etc., is usually recommended; but I believe that our pupils, before taking up the study of geography, have usually gained a knowledge of outline work sufficient to enable them to dispense with this preparatory step.

Here a question might arise as to whether, for convenience in description, names should be given to the nameless islands, capes, bays, etc. It does not seem necessary; the pupil should be taught nothing which he cannot afterward use with correctness. Let the teacher point to the object to be described —either to the object itself or to its representation in the map—instead of designating it by a proper name.

The outline map is to be extended step by step until it includes all the surrounding country familiar to the class or to a portion of the class. It should embrace enough territory to be of appreciable size when introduced into the State map, as will appear farther on. The knowledge of those pupils acquainted with the surrounding country may be used to advantage by allowing them to pass their information to the others. The teacher may assure himself by consulting a State or county map. As the outline map grows in size, of course it will become necessary to omit many of the minute details which the earlier drawings contained.

We have now reached a point where there is the greatest difference of opinion in regard to the next step to be made. Some say that we should now take up the study of the State; others, that the State is almost as little known as the whole country, and therefore the latter should now be studied; still others say that the globe should now be introduced and the continents mapped out. If we keep in mind the fact that we started with this natural method for the purpose of teaching not only geographical terms but also correct notions of geographical extent, the way seems plain. Instead of allowing our little local map to drop out of sight into the immensity of the whole

country, or, worse yet, into the vagueness of the continents, let us build it out till it covers the State. This may be done at a single step. Our local map of convenient size being on the board before the eyes of the pupils, dots representing cities —all in their proper places—in which are the homes of the pupils or of persons whom the pupils know, may lead outward from the local map toward the boundary of the State, which boundary may then be drawn. If you have a railroad or suitable river in your local map, carry it along as far as may be—to the boundary of the State if possible—dotting its course with the cities of which the class may have heard. In this way the pupils will understand that you are covering distance—going farther and farther from the little world which they have studied; and they will have an idea of the extent of the State, for the local map is there as a unit of comparison. I believe this to be a far better way than drawing the boundary of the State at first, and then placing in it the local map; for it is pursuing the same method of building up that has been used from the first, and the pupil will the more easily comprehend it. The study of the State may be followed by the study of the surrounding States; this being accompanied by the aid of the wall-map and the text-book, the pupil will indirectly gain an idea of the country as a whole; and the study of the country as a whole he will be prepared to begin on completing the study of his group of States.

Map-drawing should form a constant factor in the study of outline geography. We should not be over-critical in unimportant details; but where accuracy of knowledge is necessary, we must insist on accuracy in the map. The pupil draws his map, making it coincide with his mental picture, *i. e.*, with his knowledge of form and location. He who has accurate knowledge can draw an accurate map; the map is a test of his knowledge.

It may be unnecessary to suggest that in the study of local geography attention should be directed to the climate, soil, agricultural and mineral productions, and to manufactures. The dependence of climate on latitude and other natural causes, of agricultural productions on climate and soil should be shown.

A word might be said in regard to text-books. No author of a text-book in geography supposes that any one pupil will study all that the book contains. The book is made for use in

all sections of the country, and it is not intended that the whole country should be studied with the same detail as the pupil's own section. Hence the teacher, from the innumerable questions in the book and from the many lessons, is to make selections. It is an injury to the pupil to attempt to crowd his mind with names that subsequently will be of no profit to him.

Let no teacher suppose that the foregoing method of introduction to the study of geography is impracticable. I have not intended to give specific directions. I am arguing for the principle; the teacher can exercise his own ingenuity in matters of detail. The same or similar methods are in use in many schools in this country, in France, and in Germany. The pupil may not, at first, make as good book-recitations, but what are good recitations worth as long as the pupil does not grasp the meaning of what his memory has enabled him to recite? Here are two illustrations which came under my own observation: A class which had studied geography for nearly three years had just completed a very good recitation, when one of the boys was asked whether we could see the earth or any part of it. He replied that we could not see it because it was so far away. His knowledge was probably better than his answer, but, nevertheless, his knowledge was vague. In another class, two years in geography, a girl could not tell the name of the State of which the landscape seen from the window formed a part. Now, whose was the fault? The teacher's. The pupils had no definite knowledge because they had not been taught clearly the relation between maps and what maps are intended to represent.

We presume too much on the previous knowledge of our pupils. We are often astonished at their display of ignorance on some simple subject; but there is no reason for astonishment when we consider their limited opportunities. The clearer insight we gain into the pupil's mode of reasoning, and the more we train ourselves to read his conception of things, to look at things as he sees them, by so much the more shall we be successful in leading him to broader fields of learning; for we can then intelligently use his present knowledge in giving him new and clearer conceptions.

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VOICE, ALPHABETICS, AND LANGUAGE.—III.*

We have now reached those classified as 4th, "*quasi*-congenital deaf-mutes," and 5th, "the congenitally deaf." These will be treated as though they belonged to exactly the same class. You can choose for their teaching either one or the other of two methods; that which is called "the natural method," or that styled "the alphabetic method." The first endeavors to follow as nearly as possible the plan laid down by Mother Nature with the hearing child, and gives to the new pupil entire words for its first utterances; while the second teaches the powers of the letters before combining them into words. Each method has its advocates, and we will try to describe both somewhat, that you may choose between, or, if you prefer, combine them.

The first step in "the natural method" (and in the other as well) is to gain the attention of the child. Taking a book of brightly colored pictures, point to one after the other, and watch to see if he lingers over any particular one. If he does, use that one for your first lesson. Give him the name of it, and try to have him repeat it after you. Find another object like it, and repeat the name again, making him try to do the same. The point to be gained here is to make him associate a certain movement of your lips with a certain object; his pronunciation of the name is a secondary matter. This is the first attempt at hearing with the eye, (if we may so call it,) and as the hearing infant hears certain words many times over before it attempts to pronounce them, so will your pupil of this class frequently recognize words on your lips long before he is able to speak them correctly. Be thankful if, in this first attempt at speech, his imitative powers are sufficiently developed to enable him even to open and close his mouth as you do yours.

Encourage the slightest attempts he makes to follow you, and be careful not to weary nor discourage him by making him do the same thing over too many times. Let him take the book at which he has been looking, and go to his seat, while you try your next pupil in the same way. After a short rest call him to you again, and this time direct his attention only to the one or two objects the names of which you intend to teach him, and endeavor also to make him follow you a little more closely in

* Continued from the *Annals*, vol. xxx, p. 258.

pronouncing them As it is sometimes difficult for a novice to select suitable words, we subjoin a list of those which we have most frequently used: Eye, toe, bow (bo,) arm, thumb, papa, mamma, two, home, doll, ball, fan, top, muff, knife, mouth, door, boot, tooth, apple, water, etc.

Do not confine yourself to any set list which you may consider easy, for sometimes a child will give readily quite a difficult name, while he will blunder over others much more simple; as one boy we know would say "drum" and "water," yet would not pronounce "toe" at all. Perhaps the best plan is to dictate the names of a number of objects, having him repeat each word after you, and then make a note of those which he pronounces most correctly. Dwell on these until he has learned them, leaving the others until a later period.

During the earlier months do not give any name to the pupil unless you have the object or a picture of it to show him. Talk to the children from the time of their entrance, even if you have to point to the article you desire in order to indicate your wishes. If the door is to be closed, say, "Shut the door," at the same time pointing with your hand to the open doorway. Although we believe that a teacher should use the word "*please*" just as much as a pupil, yet at this time it would be confusing, and therefore only the command is given. Associate speech with every action and try to develop reasoning power at the very earliest moment. Having spilled some ink one day, we said to the class the word "sponge," making no motion to indicate what we wanted, except holding out one hand to receive the object we were naming. One thing after another was brought to us, but each was wrong, until finally we dipped the hand of one of the children also in the ink, and then the thought dawned upon him that he could wipe it off with the sponge, when he did so and brought it to us.

Another way is to ask for something which seems beyond their reach. Send a boy for a picture from the closet or the wall, and if he cannot reach it, let him reason out how he may procure it. Adopt any of the suggestions they may offer, and if they are wrong ones, show the fallacy of them. One child may make a spring for it, another point to the window-pole, while a third may stand on a chair to reach it. Pat the latter approvingly, and show the others by tearing some paper that their suggestions might have resulted in spoiling the picture. These may seem like slight things to take time over, but the

faculty thus developed will be of wondrous benefit in their after lives. After the class have had one or two such lessons, the pupil sent for the article may be left to think out his own way of getting it, while the rest go on with their regular work.

As soon as the child has learned the names of a few objects, simple sentences may be given. The *written* name for an article should never be given until a child can articulate it perfectly, and recognize it instantly when spoken. If writing, as a means of communication, is introduced too early, he will depend upon that more than he will upon reading from the lips, and each time he does not understand your speech will expect you to translate it for him by writing.

When it is a boy that you are teaching, the ball or top will have interested him more than the doll, and he will have showed you ere this whether he has either. If he has, give him the sentences, "I have a top," "I have a ball," or, if he has the one and not the other, say, "I have a top; I have no ball." Should he have either article at home, which is more frequently the case, simply add those two words to the sentence, viz., "I have a top at home." We once had before the class a picture of a little girl giving bread to a poor boy, and in answer to the question, "Has the boy shoes?" had taught for a reply, "The boy has *no* shoes." Our next question was, "Has the girl shoes?" and instantly a little hand went up, and the child said, "The girl has *yes* shoes."

During the early months of training by this method there is no particular system used for the development of language, but as the days pass on you will find the children more and more eager to tell you about things. When they are trying to show you that they have seen something, and wish to know the name for it, be very careful that you fully understand what they mean, or you may bestow the name "horse" on a cow or some other animal, and the evil thus done will not be remedied for many an after lesson.

Writing, merely as a mechanical exercise, may be taught from the very beginning, and this we prefer to do by calling up the class and allowing one child after another to write on the black-board while the others watch him. It is impossible for you to watch a dozen pupils write at the same time, for, while you are guiding the hand of A, B is forming letters after a fashion of his own. Our plan for some time has been to write a letter or word faintly on the black-board between two

parallel lines, and make the child write directly on our lines. Even this is not easy of accomplishment with some, as we have to hold their hands in order to hinder them from beginning at the wrong end or taking erratic leaps from one letter to another. After they have acquired some facility in tracing, allow them to write the word below your copy, first placing some guiding lines to help them give uniformity to the slant of their letters. Any word may be selected, as the pronunciation of it is not required. If "muff" should be the word chosen, the copy should be written thus: *muff*, and the guiding lines placed in this manner: /// // //. In a very short time these lines may be discarded, as they are only used to impress upon the child's mind the necessity of inclining all of his letters in the same direction.

In teaching by the "alphabetic method," first try which of the powers the child will most readily imitate, and make a note of them. Should no special difference be perceived, take the consonants *p*, *t*, and *f*, and the vowels *ah*, *aw*, and *oo*, for his earliest lessons. After he can readily recognize them on your lips and can reproduce them, show him how the written characters are made. This little writing exercise, if frequently alternated with the articulation exercises, will prove restful to both teacher and pupil. When he has mastered these sounds, add another and another, choosing the most dissimilar, so that he will not confuse them, until he has learned some dozen or so, then combine them into *words*, never into meaningless compounds—for as from the very beginning we wish to instil into his mind that every object has a name, so we wish him also to understand that every name has an object.

In forming any word, the aim is to obtain a good pronunciation of it, and while some learned authority may say the way to get this is by placing the vocal organs in just certain positions, yet if the child gives you the word clearly, though the organs are arranged differently, keep the word, and let the arrangements go; the test being, would a stranger know what word was being uttered? For instance, a boy of fifteen was brought to us, not having had any previous instruction. His lips were thick and clumsy, and his tongue had undergone an amputation of its tip, leaving a blunt edge that possessed little flexibility. His tone of voice was pleasant, and he was very

careful and painstaking, or it would have been a hopeless task to instruct him. For him the correct position of every letter had to be altered. *N* he gave by simply closing his teeth and pressing his tongue against them. *L* we have known him to practice by the hour, in order to try and curve his tongue upward, while if he undertook to give long *e* in its correct position, the bluntness of his unruly member closed up the opening so much that only a hissing noise was produced. Each sound presented some special difficulty, yet he overcame them all, and is now considered a very pleasant speaker.

Introduce words, then, just as soon as the pupil has learned sounds enough to form them. "Papa" and "paw," for instance, can be given from the very first step, as they require but the three elements, *p*, *ah*, and *aw*. It is not necessary that the entire alphabet should be learned before any attempt is made at language. Some of our English sounds he will probably not have occasion to use for months, or perhaps years. How old is a little hearing child before he ever thinks of using the *zh* sound in "pleasure," "measure," "glazier," etc.?

We would also suggest that, when teaching the powers singly, you use only the unvocalized ones, leaving the vocalized to be taught when words are given. By this means may be avoided, we think, much of the trouble caused by a child's giving voice after a final silent consonant, as "top-ah," "hat-ah," etc. When words containing the long sound of *i* are given, as "fight," etc., particular attention must be paid to the vanishing *e*, as if it is unnecessarily prolonged the word becomes "fi-eat," or else (and it is still worse) it vanishes completely, and we hear only "faht." The intelligibility of a word containing it depends greatly upon it, and a stranger may be so misled by the child's mispronunciation of the main word of a sentence as to be scarcely able to understand any of the rest of it. In a word beginning with a double consonant, as "drum," "snow," etc., be sure that no vowel sound is introduced between them, making it "dahrum," or "senow." There is also a tendency with some deaf-mutes to adopt a fashion now somewhat in vogue of forming an *r* with the lips instead of the tongue, and saying "bwoom" instead of the correct "broom." This, we are happy to state, is much more easy of correction with the deaf child than with the hearing adult, and a little care will soon break up the habit.

After a few nouns have been taught, the next step is to make

the child say, "the paw," "the toe," "the boy," etc. A verb or two may then be given, as "see" or "eat," and then the pronouns, "I" and "you." Understand, however, that we lay down no arbitrary rule of procedure. At every step of the way let the child be the guide as much as possible; take that which he will give most easily; teach that which he the most desires to know. Of course, later on, stricter rules may have to be made, and he be compelled to learn that which he has not the slightest inclination for, but during the primary years, while language is still an unknown field to him, follow his lead if possible.

With a dozen nouns, a few verbs—active are the best—and a couple of pronouns, we are prepared to start on sentences. Suppose "to eat" is the verb you have chosen for your first regular exercise on verbs. Bring an apple or two into the class-room, cut them into pieces and distribute them. It will not take the children long to eat them, but while eating, say "I eat the apple," and make each little one repeat the sentence. After they fully comprehend it and can all repeat it, try to have them frame sentences about other things which can be eaten. Hold up your fingers as if you were going to count, and say, pointing to the thumb, "I eat the apple;" then to the next finger, saying slowly, "I eat the ——," and pause as if thinking. Some child will be bright enough to guess your meaning, and will try to show you some other article of food, and, according to our experience, in nine cases out of ten it will be pie. Nod your head and say, "I eat the pie," making each child repeat the sentence also. Then point to your next finger, and by this time the children will be turning their heads to look over the pictures on the wall to see if there is anything there that can be eaten. As soon as the child thoroughly knows the word, and can pronounce it correctly, allow him to write it on the black-board. The summing up of the lesson will usually be something like this:

I eat the apple.
I eat the pie.
I eat the meat.
I eat the fish.
I eat the bread.

It is in this manner that the remaining sounds of the alphabet may be introduced. Your pupils probably have not yet learned the sound of *sh*, but they are all anxious to tell you

that they can eat fish, and therefore they will much more readily learn it now than if they had attempted it before it had any significance for them. Be careful not to give too much new matter at a time, and never teach more than one part of speech in a lesson. Do not give new nouns and new verbs at the same time. The lesson just illustrated was confined to answering the question, "I eat *what?*" and as closely as possible were the replies held to the nouns already learned. We have found it an incentive to thought to show the class, at the close of the lesson, how many sentences each pupil has thought of. Exceptions may be taken to the use of the verb "eat" in the sense given, but we have found little hearing children using it in just the same way, and it is a very easy matter, a little later on, to correct the child by saying, "Do you eat fish *now?*" and the reply given will be, "No! *before.*" Then tell them that *eat* is *now*, but *before* is *ate*—"I ate the fish." "Now," "before," and "will," are synonymous terms for present, past, and future to a little deaf-mute. The present tense is used the most often during these early lessons, as the name of the action is usually taught during its performance. A lesson or two more from our note-book will be sufficient fully to illustrate our meaning.

I hold the coat.	I tear the paper.
" " boy.	" " book.
" " paper.	" " muff.
" " key.	" " shawl.
" " bow.	" " shirt.
" " book.	" " kite.
" " cup.	" " hat.

When the plural is used, tell them we do not say "coat, coat," but we write an *s*—"coats." Then give the child two or three coats to hold, and require the sentence, "I hold the coats." Remember always to allow the children to suggest the nouns themselves. After awhile change the nominative "I" into "You," by performing the action yourself, and make them repeat the changed sentences, "You hold the coat," "You hold the boy," etc. Into these exercises naturally comes the question after each movement, "What do I do?" and from this query arose our practice of calling the verbs, "*do words.*" A Western teacher once said to us, "How soon do you think grammar may be taught?" and our reply was, "The very first year." As it was late in the term and the children had made considerable progress, we called them up to a well filled black-

board and desired one after another to point out the "*do words*," the "*who words*," the "*what words*," the "*where words*," and the "*how words*." This had been accomplished without any special teaching, except by accenting the word in the question when they made a mistake in replying; as, for instance, if they rolled a ball on the floor and it moved rapidly, they would be very apt to say "fast," when we asked *where* they rolled it, and our reply would be "How? No! *Where?* WHERE?" So we came to classifying the various parts of speech in the fashion mentioned. But we are far in advance of our subject, and have reached the end of the first term before we have been three months in school. To return to our simple sentences again, we find the following to be in our list of easy "*do words*:" eat, tie, see, pull, bite, turn, hold, roll, hide, find, open, shut, wash, wipe, cut, move, smell, sweep, feed, lift, blow, break, etc.

After the child has become familiar with this form of sentence, the possessive pronoun "my" may be taught. This is very easily done by taking something belonging to him and pretending to appropriate it yourself. The more cherished the possession, the better for the lesson. He will resent it immediately, and show in many ways that it is not yours but his. Supposing the article taken to be a top, return it to him, saying, "My top," and make him repeat the words. Do the same with a number of other objects until he will give the words to you readily. If the other members of the class have been watching, it will take but a short time to show them that they too have a right to use the word, and after this has been done, teach the word "Your," by using articles belong to yourself. Hand the object chosen to any one of them, saying inquiringly, "My?" (the "my" referring to their ownership, not yours.) The child will take it, look at it, and almost invariably hand it back to you with a shake of the head. If he does this, teach him the word "Your," and as he hands it back, bid him say "Your hat," "Your shawl," etc. Be careful to use something that they know you would not part with, lest they misunderstand your action and think you are presenting it to them. If our explanations seem so simple as to be almost unnecessary, we can only say that each of them has been given at one time or another to other adults in answer to the remark, "Yes! but *how* did you do it?" Adding "my" to their vocabulary will give them quite a number of new sentences, as "I wash my face, my hands, my eyes," etc. Having accomplished this much, or even

previous to this if a good opportunity presents itself, other nominatives may be used instead of the pronouns "I" and "You." Take for instance the lesson already given on the verb "to eat;" it is very easy to take a picture – do not say, "Suppose we do not have them;" you *must* have them—and give a lesson which will result in this way:

The mouse eats the apple.
" dog " " meat.
" cat " " bird.
" " " " mouse.
" boy " " bread.

With regard to the use of the "*s*" in the singular form of the verb, we have had no difficulty, as we have simply told the children, "I eat*s*, You eat*s*, No!" accompanied by a most emphatic shake of the head, and then complacently, "The boy eats, The girl eats." Then again, later on, when using the plural, if they wrote, "The boys eats the bread," we told them, pointing to the letters as we did so, "*s*–*s*, twice, no! The boy*s* eat the bread." It usually proved sufficient.

Having taught "my," teach the possessive as some one else's my. Call a child to you and say to him, "Have you paws?" Always ask the question, although you may have to point to a picture of a cat, and then again to him with a questioning look. He will probably shake his head and say, "The cat my paws," placing his hand on the cat to indicate that the paws belong to *it*. Then say to him, "The cat's *my* is *has*. The cat *has* paws." Let us remark, just here, that no lesson given in these pages is simply theoretic; each is a practical one, copied verbatim from notes written on the day the lesson was given, and the childish answers are those actually given by children on the same date.

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[TO BE CONTINUED.]

THE FUNCTIONS OF TOUCH IN LEARNING TO SPEAK.

1. Speech is composed of sounds uttered by the vocal organs. These sounds are different because in their production the organs are differently related. The voice with its associated organs is a musical instrument, which is governed by the laws of sound like any other instrument. This has been fully demonstrated by Helmholtz and other men of science.

2. The use of the organs of speech is acquired solely by the aid of other senses. No one has ever spoken from instinct or unconscious impulses, however strong these may be, but only after hearing and imitating what has been spoken by others. In childhood we attempted to speak and we persevered till habit made us masters of all the elements of speech. But if we had not heard, our organs of speech would have remained silent. It is hearing which conveys to the mind the sensations of sound, and enables us to form them into the ideas of the things with which they are associated. Apart from these objects they have no meaning or value save as sounds. This is why we think in words or reproduce them by memory as musical vibrations, and it is for this function that the ear has been specially constructed. Or, otherwise expressed, the ear responds to that element in the vibrations of the voice which makes them musical. This musical element is not essential to all such vibrations. They may exist undetected by the ear or any instrument we can devise for its assistance.

3. Sound is therefore neither the sole nor the primary element of voice. It is only an accidental form which it receives from the manner in which it is transmitted. In its initiation it is the breath set in motion by the lungs, and reduced to sonorous vibrations by passing through the glottis, which resembles the reed of a musical instrument. In fact, it is composed of rapid undulations which pass forward from the glottis, and are reverberated and modified by the other organs of speech. Air is a good conductor of sound because it lends itself quickly to the transmission of the undulations produced at the point of impact. But essential as hearing may be to the acquisition of speech it is not the sole agent employed for this purpose. There is another sense of which we take little note, but which is quite as essential. Touch also receives the vibrations of the

voice simultaneously with the ear, and conveys them to the sensorium, but as our attention is more attracted by what we hear than what we feel, we gradually cease to take note of the latter, and sound becomes the sole sensuous form in which voice is thought of. The stronger elements absorb the weaker. But in the mean time we continue to feel our own voice as well as to hear it, and every fresh sound, requiring a new adjustment of the organs of speech, is made under special conditions. We have to think about their places and hear that it is correctly produced before it becomes a permanent element. Those who study modern languages understand this. The new sounds are sometimes so difficult to acquire that we are compelled to drill ourselves, by frequent repetitions, into their tactic use.

4. But the eye of a child detects none of these organic arrangements. Neither do parents attempt to show them, and it is only after many failures that the ear and the touch guide him to the correct manner of producing the sounds. Repetition aids the senses, and in a short time the organs acquire a facility of action which renders speaking easy and agreeable. Each sound requires its own organic arrangement, but its correct articulation once would be of little value when it had to be repeated, were it not that touch retains the impression made by the first action so vividly that it guides the organs into the right position for its renewal. Let any one who performs on a musical instrument carefully consider the manner in which his lips or his fingers have acquired their wonderful facility in the execution of a piece of music, and he will soon perceive that it is chiefly due to the use of touch. Though at last the fingers may appear to be instinct with some life of their own, and to have no place in the mental parts of the performance, yet each impact is ruled by that touch which learned the form or key and fixed it by laborious repetitions as a permanent element. In the same manner the organs of speech find their places and their movements under touch guidance. Will, hearing, muscular action, voice, and touch all unite in the production of the sounds which reveal our every thought, or entrance us with their sweetness. The habit which seems like a second nature grows out of the constant exercise of these agents.

5. All deaf-mutes possess the sense of touch. This enables us through the vibrations it detects to bring them into direct *rapport* with sound. They can know and form an idea of it as

vibration, in the same manner that we know and regard it as sound. They have equally with ourselves an intuitive perception of it. Sounds differ in volume and pitch, and they also differ in their vibrations. This has been mathematically demonstrated by Helmholtz in his "*Théorie Physiologique de la Musique*," (*traduction de Gueroult.*) The finger touch of a deaf-mute on our glottis can without any previous instruction detect these vibrations, and at once he obeys the natural impulse to produce similar vibrations or motions, and he knows that he produces them. A deaf-mute who has been instructed by this method can perceive sounds in their distinctive vibrations as strong or weak, high or low. As teachers we begin with it to convey to him an idea of sound, and we resort to it frequently in our difficulties, but we do not systematically educate it up to its greatest capacity. Taking the place, as it really does, of the hearing, would not its intelligent culture raise speech more fully into the sense relations of sound to idea, and at the same time give the mind a firmer hold on the organs of speech?

6. In seeking to assign to touch its true place in learning or teaching speech we have no wish to depreciate the function of sight; on the contrary, we would exalt its noble mission. Without it lip-reading would be almost impossible, and the position of the organs would also be much more difficult to perceive. The visible muscular movements occasioned by the voice are very evident to the eye, but they have not the same relations to sound as thus perceived which they have to touch and hearing. Reading on the lips can never render sound intuitive or transport it to the sensorium, for the muscular effects which speech produces, as seen by the eye, are only signs of the vibrations or essential elements. Sight knows nothing of sound as such. It can read the ideographs and the figures of language, but it never can animate them with the living voice. Touch is in fact the only sense which puts the deaf in *rapport* with sound, and puts them, too, in relation to the laws of thought as if they heard. To burden a sense with functions that it never discharges, and to give it credit for what is impossible, is not to do it honor, but to make hurtful demands upon its power, and at the same time to withdraw the attention from others far better prepared to do the work in which it fails. If smell or taste can be of any service in our teaching let them be employed, but let touch have its proper function as well as sight to supply the place of the lost sense.

7. Let us pursue this subject a little further; it will permit a greater development. Whether the deaf know anything about harmony or discord, sweet or rough, in sounds, I am not prepared to affirm or deny. Sometimes I have seen them disturbed by very loud harsh sounds, but never when a discord was produced by two inharmonious notes. None of those I have instructed have ever been able to describe their sensations as other than vibrations or motions destitute of what we call voice. It may be assumed that the special structure of the hearing ear is required to detect and to distinguish the musical variations of sound, as it is in fact the waves created by a percussion or forcing of the air through an aperture; it is very unlikely that touch would be responsive to these phenomena. Each sense is related to matter only in certain of its aspects. The five seem to put us in possession of the principal. Whether more senses might not have been added by which our knowledge of the material universe would have been greatly increased is a subject which has often been discussed by the philosophers, but as we have to do with what is, and not what might be, we may well leave it to them, and occupy ourselves more practically. The loss of a sense is the privation of the knowledge of the aspects of matter which it served to reveal. Touch hears no sounds; blindness sees no colors. But touch enables the blind to form as definite conceptions as ourselves of form, bulk, distance, heat and cold, weight and pressure, softness and hardness. Their mental images of things are like mathematical figures or outline engravings, and hence they can have corresponding ideas of the beauty and harmony of their proportions, their terrible grandeur, or their exquisite delicacy. Touch in them is most highly cultured. It is said they can detect the difference of colors by the variations in the degrees of warmth. As the fingers of a blind person run along the letters of a book he translates the symbols into sounds, and thinks of the meaning as we ourselves do. He by touch, as we by sight, perceives their form. Touch has achieved great things for the blind; may it not do more for the deaf?

8. The skin is the *organ of touch;* "one of the distinguishing characteristics of this sense is its universal diffusion over the exterior of the body, by which its sphere of action is a recipient of impressions, and, as a criterion of locality, is rendered more extensive than that of any other. The contact of foreign bodies is perceived as occurring at the point at which they

usually strike the organ of touch, whether that point be within the sphere of operation of any other sense or not. *The precision with which this is effected depends very much on the degree of development of the papillary tissue in the several regions of the body.*"—*Todd and Bowman.*

"These papillæ present great varieties in different parts. As they are the nerve points of touch, these varieties will be found to correspond with differences in the mobility of such parts. In general, touch is most acute in regions best suited by their structure for easy and diversified contact with external substances; for the power of nicely determining the position, direction, and amount of pressure upon the organs of touch, is essential to the sense. The will can not only excite and check the contractions of the muscles, but is able to regulate their force and duration with wonderful precision; for by the *muscular sense* the mind is able to appreciate the state of contraction of a muscle by impressions originating in the nerves supplied to its fibres. This power, both of recognizing and governing the muscular movements, is from our earliest infancy brought into association with the impressions derived from the tactile organ, and made accessory to its function; *and the perfection to which habit, in numerous instances, brings the sense of touch, is chiefly due to an improved capacity it confers of appreciating the impressions made on the organ, in connection with niceties of muscular movement.*"—*Todd and Bowman.*

9. From these quotations it is seen that the touch papillæ are more numerous and more highly developed in the more active parts of the body, as the fingers, feet, tongue, and lips, so that in teaching speech we can avail ourselves of their assistance. But in addition to this it ought to be remembered—

1st. That the active employment and consequent increased perfection to which a sense is brought in any special use prepares for it a more successful employment in any other use, because of the increased power of the will over the organ and the greater facility of action which it has acquired.

2d. That this command of the organ of touch in any one part, as in the fingers, renders a similar command much more facile to acquire in any other part, as the lips and tongue, because of the union of the nerve centres in the brain, and its increased power over them, no matter how wide they may be apart at the extremities.

If these principles are true to nature, then it follows that the sense of touch ought to be as highly educated as possible in other members of the body, as the hands, in order to increase its power and activity in the organs of speech. Learning to write, or doing any manual work by which we distinguish different degrees of softness or hardness, cold or warmth, roughness or smoothness, with the muscular efforts required in pushing, pulling, heaving, or lifting diverse weights, might all be appropriately used as exercises to increase the tactic sensibility. Another set of exercises might also be constructed in the use of touch alone, sight being blindfolded, to learn the forms, sizes, and distances of objects, as the blind have to do, so that ideas might be formed of them independently of light. This too would be helpful to the deaf when they had to adjust their organs of speech.

Professor Bain, in his work on the "*Senses and Intellect*," says, under the head of Touch: "Touch is an intellectual sense of a higher order than taste or smell. It is not merely a knowledge-giving sense, as they all are, but a source of ideas and conceptions of the kind that remain in the intellect and embrace the outer world." "But touch considered as a source of ideas is really not a simple sense, but a compound of sense and motion." "Another mark of its superiority over taste and smell, and qualifying it to furnish intellectual forms and imagery, is the distinctness or separateness of the sensations felt over the different parts of the skin. The sensations of the different parts of the surface of smell would seem to fuse all into one stream of sensibility." "But the sensations of the skin are conveyed by distinct nervous filaments: each little area of skin has a separate nerve and an independent communication with the nerve centres, whereby we can, after a little education, refer each sensation to the spot where the contact is made." These views go far in sustaining all we have claimed for touch as exercise in speech. Through it the sensations resulting from every organic contact become objects of perception and are increasingly subjected to the will, till the action is perfected by use as the finger of an accomplished musician infallibly presses on the right key or hole.

10. Turning now to the organs of speech, let us consider them in relation to touch, and first let us learn what the anatomist says about them: "The skin of the face is more and more sensitive as we approach the middle line; and the tip of the nose

and red part of the lips are acutely so, and only inferior to the tip of the tongue. This last, in a space of a few square lines, exceeds the most sensitive parts of the fingers; and points of contact with it may be generally perceived distinctly from one another when only one-third of a line intervenes between them. As we recede from the tip along the back or sides of the tongue, we find the sense of touch much duller."— *Todd and Bowman.* The organs, therefore, which are most frequently employed in speech are the most sensitive, and especially the tongue, which is pre-eminently the organ of speech. *Languages* are *tongues*, in the oldest literature; other organs no doubt discharge important functions, but it is the part of the tongue to give form to most of the articulate sounds. This is neither the time nor the place to attempt an anatomical description of the muscular and nervous action required by the voice. Such works as *Merkel's Stimme- und Sprach-Organe*, *J. Gavarret's Phenomènes Physiques de la Phonation*, *Todd and Bowman's Physiological Anatomy*, *Von Myer's Organs of Speech*, *Tyndal's Sound*, and *Helmholtz's* work already referred to, will furnish much information, especially the first. Our object is to illustrate what has been said on the functions of touch. Supposing then that the student has made himself acquainted with the theoretic part of the subject, his attention is now directed to one of the principal elements with which he will have constantly to deal, and upon whose thoughtful use his success will chiefly depend. His first attempt to teach will bring him into contact with touch. He must use it to instruct the pupil in the control of his breath, and afterwards in the use of his voice. The hand before the lips or on the throat will do more to reveal the undulatory nature of sound than anything else he can do. It is the learner and not the teacher who discovers, and through touch, that he has a voice like his teacher's and can utter articulate sounds. This is the foundation of all that has to be built up by sounds. The eye is not employed here.

11. Now the vowel sounds, from the manner of their production, furnish a valuable series of exercises in touch. They are all voice sounds issuing from the same point, but modified by the position of the organs through which they pass. None of them are simple, but all are compounds of the vibrations and deflections of the resonant tube through which they must pass from the glottis before they escape from the lips. Touch can detect them all. Better for practical purposes that one

hand of the learner should be placed on the glottis or other organs of the teacher and the other on his own. This brings both into closer *rapport*. But touch will not only detect the vibrations of all, but also a difference amongst these vibrations. And here a piano might be resorted to, and a careful examination made how many of the notes he can feel, and what is the difference in his feelings between the higher and the lower. At first there will be some confusion from the novelty of the exercise, but gradually from the exercise of touch he is almost certain to mark a difference of faster or slower, stronger or weaker, according to the pitch. Now let a similar exercise be made on the voice from the highest to the deepest of the vowel sounds, and in a short time he will detect considerable variations in their vibrations. If at the same time he is made to understand and feel that they arise from variations in the form of the mouth, he begins to perceive the close relation of sound to shape and capacity. It is possible that his ability to distinguish the vowels by touch alone may be very limited at first, and hence the teacher be tempted to abandon the exercise as of no value; but let him reflect that in so doing he would neglect the better development of the sense on which the conscious use of sound by the learner as a symbol of thought mainly depends. Touch is to him the sole guide and corrective of articulate sounds, and he ought to be able to use it with as much precision as his loss of hearing will permit.

12. In the production of the vowels the tongue or lips are more or less employed. In some it has to lie close on the floor, in others to be raised or drawn back. From the habit of speaking, we have unconsciously acquired ability to keep the tongue, especially towards the epiglottis, close on to its floor, that the voice may have free emission, and only by reflection do we perceive that a pressure is exerted in that direction. But touch has taught us this habit, and we must let touch and habit do the same for the learner. In this manner also may we account for the retention of their voice by persons who have quite lost their hearing. The ear no longer guides or corrects sound for them, but touch and the habits formed under its rule remain in sufficient vigor to make all they say intelligible through life, though somewhat impaired. On the contrary, children who lose their hearing soon lose their speech, because touch and its habits are not so fully confirmed; nor is the control of the will over the organs so perfect as in riper years. In all such

cases no time ought to be lost in providing a teacher under whose skilful direction the speech may be kept up to its normal state. This will both prevent a great loss, and an immense labor to restore it after it has ceased to be intelligible.

The vowels *ē* and *i* are difficult to the learner because our means of suggesting the right position and shape of the tongue are imperfect. But touch comes to our aid. Let the tip of the tongue be pressed against the lower teeth on the inside, and the dorsum gradually raised towards the palate, and in most cases *ē* will be formed. In addition to this, if the sides are made to press against the upper molars the narrow passage will be formed for its issue. In a similar way the short *e* may be taught.

13. It has been already stated that the papillæ of touch on parts of the tongue "exceed in number the most sensitive parts of the fingers." Bearing this in mind and knowing how much the tip of the tongue is used in the sounds, *th*, *s*, *t*, *d*, *n*, *l*, and *r*, its full energy ought to be early attended to not only in its different offices in articulation, but on things external to the lips: sweet, bitter, hard, soft, cold, warm, rough, and smooth substances might be resorted to till the sensibility is fully developed. Some of these qualities will exercise taste rather than touch, but this will be no loss. They are kindred senses, and mutually assist one another. As the correction of confirmed errors is more difficult than teaching the true forms, no pains ought to be spared at first in leading the learner to control his tongue and place it aright. Nature does not always select the most convenient position or the most facile movements of the voice, but often imposes on nations difficult, harsh, hissing or hard guttural sounds which do not add much to the music of speech or the delights of the learner. But we have no authority to innovate, and must teach all the sounds and alter all the spelling to suit them. The Italians have an immense advantage over us in this respect. Their labor in learning is much less than ours, for all the letters are pronounced, and all the sounds are comparatively easy. Our task is more trying, but it is possible that the mastery of the greatest difficulties in articulation may add to our better knowledge of elementary forms. Nature yields to the most resolute and persevering, and in the process opens up new lines.

14. Let us, however, not be understood to claim for touch more than its function can perform. It cannot without help

perceive all the modifications of the voice so as to become an efficient agent in teaching speech. Its fineness is not so great that it can detect and distinguish the more delicate vibrations which the consonants produce. Can nothing be done to fortify and intensify these vibrations so that they will enable the learner to perceive and interpret all the sounds of the language? Is it beyond the boundaries of possible science? We fervently hope not. The discovery of the audiphone and the microphone, which have done so much for the ear, has given fresh wings to our hopes. They take up these very sound vibrations and intensify them a thousand-fold. Can nothing similar be done for touch? Let men of science come to our aid, and one day the touch of the deaf may interpret sounds more quickly than the fingers of the blind can interpret the raised letters of his book.

15. Professors Marey and Rosapelly of Paris have made great progress in this direction. In an article called "*Physiologie Expérimentale*" written by Mr. Rosapelly, and published in the report "*Des Traveaux du Laboratoire de Mr. Marey*," he gives a detailed description of a phonograph which is so constructed as to inscribe the vibrations of the voice on a cylinder whose revolutions are produced and regulated by an appropriate mechanism. From the characters so formed, which differ according to the sound, but are the same in each, it is evident that a phonetic alphabet might be formed, subject it may be to considerable variations on account of the timbre of the voice and the peculiarities of articulation, but similar in general outline. Such an apparatus might aid the learner to correct the errors of his own articulation after he had learned the elementary forms, but would be of no use in teaching him the sounds themselves. This would have to be done in the ordinary manner by a master before he could compare the transcription with the standard alphabet. Another segment is required to complete the circle. Could the instrument be so constructed that either the glottis or the finger of the learner might take the place of the cylinder so that he could feel the same vibrations in a more intensified form, as the ear receives them from the microphone, and follow them in the order of their production, then his relations to sound would approximate to our own, and his power over his own voice be proportionately increased. Touch would be at its maximum, and render a full report to the percipient mind of all that it registered.

16. On the other hand, grave doubts have been thrown by some men of science on the utility of the phonograph as a reliable register of the voice. Mr. Myer, in the *Popular Science Monthly* for April, 1878, after reciting a number of its defects, says: "These facts demonstrate on the other hand that there is no reason to hope that the traces and impressions of the phonograph can be read, for these traces vary, not only with the nature of the voices but also with the varying forces of the emission of the harmonics of these voices and with the relative variations of the intensity of these harmonics." But the author hesitates to commit himself to a final judgment on what is possible to science in the future, and concludes by saying that "the question is very complex, and the science of acoustics is still far from being fully elucidated." Dr. Graham Bell and others are at work on the subject; let us hope that their researches will win the secret from nature which will enable the deaf to hear with their fingers as well as others do with their ears. But should they not be so successful, we shall do better in our oral teaching if we pay closer attention to the systematic education of touch, so that the vocal sounds may be accurately produced, clearly perceived, and more firmly retained.

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HISTORY OF THE EDUCATION OF THE DEAF IN THE UNITED STATES.*

THE first attempt, of which any record now appears, to teach the deaf in America, was made by the Rev. John Stanford, about the year 1810. He was then acting as chaplain to the almshouse of the city of New York, and found in that establishment several deaf-mute children, whom he undertook to teach by causing them to write the names of familiar objects on slates. Finding the work of imparting a knowledge of language to deaf-mutes more difficult than he had expected, demanding more time than he could afford, he was compelled to relinquish his undertaking. His interest, however, in the education of the deaf continued, and he was a few years later one of the found-

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ers of the New York Institution for the Instruction of the Deaf and Dumb.

The first effort to teach deaf-mutes in the United States in any systematic manner was made in Goochland county, Va., in 1812, in the family of Col. William Bolling, who had three deaf children, and whose brother and sister had been taught some years before in Edinburgh, in the school established by Thomas Braidwood, and carried on there by the Braidwood family. John Braidwood, a grandson of Thomas, came to America in 1812, with the design of establishing an institution for the instruction of the deaf on a large scale. Col. Bolling invited young Braidwood to take charge of the training of his three children, and later advanced funds to aid in the organization of a permanent school in Baltimore. But Braidwood, though possessed of skill and ability as a teacher, squandered the funds intrusted to him in an irregular manner of life. He was twice assisted by Col. Bolling in efforts to set up a private school in Virginia; he made a feeble attempt at carrying on a school in New York city, and finally died a victim to intemperance.

The establishment of the first actual school for the deaf in America grew out of the interest manifested by the late Rev. Thos. H. Gallaudet, LL. D., of Hartford, Conn., in a deaf-mute daughter of Dr. Mason F. Cogswell, of that city, in 1814. Dr. Gallaudet had just graduated from the Andover Theological Seminary, and was expecting to enter the Congregational ministry. Having some months of leisure during the winter of 1814–'15, he devoted considerable time to the instruction of the child, Alice Cogswell, and succeeded in imparting to her a knowledge of many simple words and sentences. This success led her father, Dr. M. F. Cogswell, to entertain the idea of the establishment of a school for the deaf in his own town, where his child, with others similarly afflicted, might be educated. A number of gentlemen met at Dr. Cogswell's house, March 13, 1815, to consider the suggestion, and these gentlemen appointed Dr. Cogswell and Mr. Ward Woodbridge a committee to raise funds to defray the expense of sending a suitable person to Europe for the purpose of acquiring the art of teaching deaf-mutes. Mr. Woodbridge, heading the list with a liberal subscription, secured the pledge of a sufficient sum in a single day. Dr. Gallaudet was urged to undertake the labor of establishing the proposed institution, and after some hesitation consented

to do so. He sailed for Europe on the 25th of April, 1815, was unsuccessful in his efforts to obtain the necessary training in Great Britain, but was cordially received by the Abbe Sicard, the Director of the Institution for Deaf-Mutes in Paris. After acquainting himself with the method pursued by that eminent teacher, Dr. Gallaudet returned to Hartford in August, 1816.

He devoted his time during the following autumn and winter to the collection of funds for the new institution, and the school was opened April 15, 1817, in Hartford, with about twenty pupils. The first grant of public funds in behalf of the education of the deaf in this country was an appropriation made in October, 1816, by the legislature of Connecticut, of $5,000 in aid of the new institution. During the winter of 1818–'19 the Congress of the United States made a grant of a township of land (more than 23,000 acres) to the institution. This was sold to good advantage, yielding a fund of more than $300,000, the income from which has accrued to the benefit, mainly, of the New England States, by diminishing the *per capita* cost of educating the deaf in that section of the country. The institution thus established remained under the management of Dr. Gallaudet fourteen years. It has been sustained in a course of unbroken prosperity, and holds a place at the present time of highest rank among the local schools of the country. More than 2,000 children have been educated to lives of usefulness within its walls, many of its teachers have been called upon to organize and take charge of schools in various parts of the country, many persons have come to it to fit themselves to become teachers of the deaf, and this now venerable institution is justly looked up to and honored as the *mother school* of sixty-four in which the education of the deaf is provided for in the United States at the present time.

The second school for the education of the deaf in America was opened in New York city, in May, 1818. The suggestion for its establishment came from the unsuccessful effort of John Braidwood, already referred to, in which the interest of Dr. Samuel Akerly was excited. With the co-operation of Dr. Samuel L. Mitchell, a society was organized with the distinguished De Witt Clinton at its head, which was incorporated by the legislature of New York, April 15, 1817, under the name of the New York Institution for the Instruction of the Deaf and Dumb.

The means for the support of the Institution were, at first,

subscriptions and donations, with payments from such parents of pupils as had means. The city of New York soon provided for ten day-scholars, and the legislature of the State promptly followed, first with donations of money, but soon (in 1821) with a permanent and specific provision for thirty-two State pupils. The liberality of the legislature has continued without interruption, increasing from year to year, and now embraces seven institutions located within the limits of the State, in which 1,300 children are receiving education.

The New York Institution was for several years after its opening under the charge of Dr. Akerly. In 1821 Mr. Horace Loofborrow became the principal teacher and occupied that position for ten years.

The work of the Institution had many difficulties and drawbacks, arising in part from the lack of well-qualified and competent teachers, and from the irregular attendance of pupils, a large proportion of whom were day-scholars. But in 1831 the Institution made a new departure by securing the services of the late Harvey P. Peet, LL. D., as principal, in which office were united the duties previously delegated to the superintendent and the principal teacher.

Dr. Peet had been for several years connected with the Institution at Hartford, in the capacity of steward, and possessed qualifications, both natural and acquired, which well fitted him to assume the direction of such an establishment. As an assistant of Dr. Gallaudet, at Hartford, he had come to understand that the task of teaching the deaf demanded for its successful performance persons of exceptional ability and zeal. And the excellent results that followed his administration were owing in a large degree to his selection of his assistants. Among them were a number of young men of great talent, several of whom, after devoting years to teaching the deaf, left the profession to become distinguished in science, literature, and the work of general education.

The Institution remained under the able and energetic control of Dr. Peet for nearly thirty-six years, and at the time of his resignation, in 1867, the Institution had educated nearly 2,000 children. Under the management of Dr. Isaac Lewis Peet, who succeeded his father in the office of principal, the New York Institution has held its place in public esteem, and for many years enjoyed the distinction of being the largest school for the deaf in the world. Within a short time, however,

the numbers of the Illinois and Pennsylvania Institutions have exceeded those of the New York.

Massachusetts was the next State to provide for the education of the deaf at public expense, making an appropriation, in 1819, for the support of twenty beneficiaries in the school at Hartford. Pennsylvania followed the example of her eastern sisters in 1820. The Board of Directors of the Pennsylvania Institution for the Deaf and Dumb was organized April 20, 1820, under the presidency of the Right Rev. Wm. White, D.D. Some months previously Mr. David G. Seixas had opened a private day-school for the deaf in his own house in Philadelphia. Among his first pupils was John Carlin, who has attained distinction as an artist, and as the only congenital deaf-mute who has ever succeeded in composing poetry. This school was adopted by the organization just alluded to. Mr. Seixas was appointed principal, funds were freely advanced by benevolent persons in Philadelphia, and the infant institution well provided for during the summer, fall, and winter of 1820–'21. In February, 1821, the legislature of Pennsylvania passed an act incorporating the Institution, and authorized the education of fifty children at the expense of the State.

Mr. Seixas, after filling the office of principal for eighteen months, was succeeded temporarily by Mr. Laurent Clerc, the distinguished deaf-mute pupil of Sicard, who accompanied Dr. Gallaudet on his return from France, and rendered valuable services for many years as a teacher in the Institution at Hartford. Mr. Clerc, after remaining seven months in Philadelphia, systematizing the work and methods of the school, returned to his labors at Hartford, and was succeeded by Mr. Lewis Weld, who had acquired the art of teaching the deaf as an assistant of Dr. Gallaudet at Hartford. Under the management of Mr. Weld, which continued until 1830, when he was called to succeed Dr. Gallaudet as principal of the Hartford school, the Institution became well established. Its usefulness has increased during the years of its existence, and it now has more than 400 pupils.

The State of New Hampshire made provision in 1821 for the education of ten deaf-mutes in the Hartford Institution; and in the same year the legislature of New Jersey passed an act making an annual appropriation for the education of the deaf and dumb of the State "in some suitable and convenient insti-

tution." Under the provisions of this law the deaf of New Jersey were educated at New York and Philadelphia until 1883.

In Kentucky the fourth school was established in 1823. The legislature passed an act, Dec. 7, 1822, establishing a school for deaf-mutes, and providing for its support. The passage of this act was mainly due to the efforts of Gen. Elias Barbee. The school was opened for pupils at Danville, April 27, 1823, and placed in charge of Rev. John R. Kerr, a gentleman of good education, but without experience in teaching the deaf. Two deaf-mutes, young men, were successively employed as teachers, but were found to be incompetent. The board of directors, finding it impossible to secure the services of an experienced instructor of deaf-mutes, engaged John A. Jacobs, a young man of unusual ability, who was then pursuing his studies at Centre College, Danville, Ky. Mr. Jacobs went to Hartford to seek the aid of Dr. Gallaudet and his assistants in acquiring the art of teaching the deaf. He remained an inmate of the Hartford Institution for eighteen months, and then, before he had completed his twentieth year, returned to Kentucky to assume the direction of the school at Danville. He conducted the affairs of the Kentucky Institution with marked ability and success for a period of forty-four years.

In this connection we take occasion to condemn the mistake of placing at the head of institutions for the deaf men without previous knowledge of the art of teaching that class of persons. No censure can be too severe on such action, at once seriously injurious to the interests of pupils, and insulting to the body of teachers employed in various institutions, among whom may be found men fitted by experience and natural ability to assume the direction of an institution. If, indeed, it prove a matter of difficulty to secure the services of such a man, then let the wise example of the directors of the Kentucky Institution be followed, and the crime avoided of appointing, for political or personal considerations, inexperienced men to positions which can only be properly filled by specialists.

Maine and Vermont were the next States to provide for the education of the deaf, each making appropriations in 1825 to maintain beneficiaries at the Hartford Institution. During the same year a school for the deaf was opened in Canajoharie, N. Y., the establishment of which was authorized by an act of the legislature, passed in 1822. Mr. Wm. Reid, a graduate of Union College, spent some time at the New York Institu-

tion, in 1825, preparing himself to be principal of this school, and assumed the direction of it at its opening. This Institution was kept up until the year 1836, when it was discontinued, and its pupils, together with Mr. Oran W. Morris, were transferred to the New York Institution, Mr. Morris becoming an instructor therein. Mr. Levi S. Backus, one of the earliest pupils of the Hartford Institution, was an instructor in this school, and when it closed Mr. Backus became the editor of *The Radii*, a weekly newspaper published at Fort Plain, N. Y., and for many years was the only deaf-mute editor in the world.

In December, 1825, an act was passed by the legislature of New Jersey to "incorporate and endow the New Jersey Institution for the Deaf and Dumb," but the Institution was not organized at that time, the provision by the State, previously made for maintaining beneficiaries in the New York and Philadelphia schools, being deemed adequate to the wants of the deaf of New Jersey. In 1883, a school was opened at Chambersburg, near Trenton, where the deaf children of New Jersey are now successfully educated.

In May, 1827, a school for the deaf was opened at Tallmadge, Summit county, Ohio, where in the family of Mr. Justus Bradley were three deaf-mute girls. These, with eight other deaf-mutes, were placed under the instruction of Mr. C. Smith, a deaf-mute, who had been for six years a pupil in the Hartford Institution. The school was sustained by private charity, with the exception of $100 granted by the legislature of Ohio in 1828. An unsuccessful effort had been made in Ohio to provide for the education of the deaf by the citizens of Cincinnati in 1821, who went so far as to send the Rev. James Chute to Hartford to acquire the art of teaching from Dr. Gallaudet.

This enterprise was opposed in the legislature mainly on account of the proposed location of the school, which was not a central one. In January, 1827, the legislature of Ohio passed an act providing for the establishment of an institution for the deaf. The organization of the board of directors was effected in July following, with the Rev. James Hoge, D. D., as president. In March, 1828, Mr. Horatio N. Hubbell, who had been chosen principal, went to Hartford to secure a knowledge of the art of teaching the deaf, remaining there about a year and a half. In January, 1829, the legislature located the Institution at Columbus, and it was opened for pupils in October of that

year. This school has continued in successful operation, and now stands fourth in the country in point of numbers. Mr. Hubbell, the first principal, presided over the Institution with honor and success for twenty-four years, when he voluntarily retired.

In 1835, the States of South Carolina and Georgia made provision for the maintenance of beneficiaries at the Hartford Institution, continuing to send pupils thither until schools were organized within their own limits; the latter State establishing an institution in 1846, and the former in 1849.

In 1839, an institution for the education, under the same roof, of the two classes, the deaf and the blind, was opened at Staunton, Va., receiving the bounty of the State from the outset. The department for deaf-mutes was placed under the charge of Rev. Joseph D. Tyler, who had been for seven years an instructor in the Hartford Institution. Mr. Tyler's able management, which continued until his death, in 1851, did much to settle the Institution on firm foundations. During the civil war its operations were restricted by lack of funds, and by the diversion of its buildings to the uses of a military hospital.

In the year 1842, a deaf-mute young man, who had been a pupil in the school at New York, collected a half-dozen deaf-mutes in Park county, Indiana, and began teaching them. Not being well fitted for the work, his school was continued only a year. Attention was, however, directed by his undertaking to the importance of deaf-mute education in Indiana, and the legislature voted him $200 as a compensation for his services.

In 1843, a law was enacted with great unanimity, as a preliminary measure, by which a tax was levied of two mills on each $100, for the purpose of supporting an institution for the education of the deaf. In May of that year Mr. William Willard, a well-educated deaf-mute, who had been an instructor for twelve years in the school at Columbus, visited Indianapolis and interested himself in the organization of the new institution. With the indorsement of prominent citizens of the State, Mr. Willard spent the summer in travelling over the State in search of pupils, and in October a school was opened under his direction with 16 pupils. An act incorporating the new Institution was passed Jan. 15, 1844, and a board of directors was organized. Mr. Willard's school was adopted by the board, and he remained in charge a second year, when Mr. James S. Brown, who had been for four years an instructor in the Ohio Institu-

tion, was placed at the head of the Institution. Mr. Willard continued to teach for many years. Under Mr. Brown's management the Institution enjoyed a healthy and rapid development. Liberal appropriations were judiciously expended under his direction, and by the end of 1851 commodious buildings, capable of accommodating 200 pupils, were completed.

In 1845, Rhode Island made provision for the education of her deaf-mutes in the Hartford Institution. Since 1877 there has been a School for the Deaf in Providence.

The Tennessee School for the Deaf and Dumbw as incorporated in the winter of 1843–'44. Rev. R. B. McMullen was the first president of the board of trustees. The organization of the institution was due to the strong rivalry then existing between Middle and East Tennessee. A bill was proposed to the legislature by a member from Middle Tennessee for the establishment of an institution for the blind at Nashville, when Gen. Cocke, a prominent member from East Tennessee, immediately arose and proposed an amendment providing for a school for the deaf to be located at Knoxville. Rev. Thomas MacIntire, Ph. D., for four years previously an instructor in the Ohio Institution, was appointed principal, Jan. 1, 1845, and the school was opened at Knoxville April 14, but no pupil applied for admission. This was partly owing to the fact that payment for board and tuition was expected, but mainly to an indisposition on the part of parents to allow their deaf children to leave home. After waiting a month, without obtaining pupils, the board determined to issue new circulars offering free board and tuition to a limited number. This brought six pupils, whose instruction was commenced early in June. The number of pupils increased to ten, and the school was closed in February, 1846, for lack of funds. In the absence of funds from the State, private benevolence was successfully appealed to, and during the summer of 1846 suitable grounds and buildings were secured, and the school was reopened with thirteen pupils. Circumstances led Dr. MacIntire, since become well known as the successful superintendent for many years of the Indiana Institution, and later of the Michigan and Western Pennsylvania Institutions, to resign in August, 1850, after having done much to build up the school in Tennessee. This Institution has passed through many vicissitudes, being suspended and much injured during the civil war; but it was

reopened after the war, and has since received liberal aid from the State. It is now in a flourishing condition.

During the summer of 1843 Mr. William D. Cooke, then connected with the school at Staunton, Va., made a tour in North Carolina, accompanied by a young deaf-mute, for the purpose of exciting an interest in the education of the deaf. He gave exhibitions of the manner of teaching, and urged in a number of public meetings the importance of providing for the instruction of the deaf. As a result of his efforts the legislature passed an act in January, 1845, establishing an institution and providing for its support. Mr. Cooke was appointed principal, and the school was opened May 1, 1845, with seven pupils, which number increased to seventeen before the close of the session. In April, 1848, the corner-stone of a permanent building was laid by the Masonic fraternity, and Dr. Peet, the principal of the New York Institution, delivered an address. This Institution was continued without interruption during the civil war, and is now in a flourishing condition.

The legislature of Illinois passed an act establishing an institution for the deaf Feb. 23, 1839, and appropriating one-quarter per cent. of the interest upon the school, college, and seminary fund to the Institution. The board of directors was organized under the presidency of Joseph Duncan, Esq., June 29, 1839, but owing to a variety of causes, especially the disturbance in the value of bank currency, which was wide-spread at that period, the completion of the buildings of the Institution was delayed until the autumn of 1845. The school was located at Jacksonville, and was opened for pupils Dec. 1, 1845. Mr. Thomas Officer, for five years previous an instructor in the Ohio Institution, was appointed principal. In the first year the number of pupils was 9, and in the following year 14. Mr. Officer proved an eminently capable principal, and during the ten years he continued in charge of the Institution its growth was rapid and healthy. At the time of his resignation, in 1855, permanent buildings for the Institution were completed, and the number of pupils had risen beyond 150. Philip G. Gillett, LL. D., was appointed principal of the Institution in 1856, and is still in office. Dr. Gillett had been for four years an instructor in the Indiana Institution. Under his very energetic and able management the Illinois Institution has had a growth unparalleled in the history of schools for the deaf. Liberal appropriations from the State have provided for the improve-

ment and enlargement of the buildings; the moneys granted have been so well expended that the school at Jacksonville is to-day probably superior in the convenience of its arrangements and appointments to any other establishment for the education of the deaf; and in the number of its pupils it leads the world, 504 being reported in December, 1885.

Of the institutions, the story of whose origin has now been briefly sketched, ten are in full operation, and these ten were established within thirty years from the time when Dr. Thomas H. Gallaudet began his pioneer work at Hartford.

During the thirty-five years which have followed the opening of the Illinois Institution more than fifty schools for the deaf have been established in our country, and fifty-four of them are now in operation.

Of these fifty-four schools, three are deserving of particular notice, for the reason that in connection with their development new and important features in deaf-mute education have been perfected.

In 1856, an adventurer from the city of New York brought with him to Washington, D. C., five little deaf-mute children whom he had gathered from the almshouses and streets of the metropolis. With the aid of a number of benevolent citizens he succeeded in setting up a school, and in collecting half a score of deaf and blind children belonging to the District of Columbia. Most prominent among the friends of the school was the Hon. Amos Kendall, who soon discovered that the would-be founder of the new institution was a man wholly unworthy of confidence. A little investigation showed that he had been maltreating the children under his care, and misusing the funds intrusted to his hands. Mr. Kendall preferred charges against him in the criminal court of the District, and was constituted by the court the legal guardian of the children brought from New York. The others having been removed from the school by their parents, Mr. Kendall took measures for the organization of an institution in due and proper form. An act of Congress was approved Feb. 16, 1857, incorporating the Columbia Institution for the Instruction of the Deaf and Dumb and the Blind, naming a provisional board of directors, with Mr. Kendall as its president. In May of the same year the board appointed Edward M. Gallaudet and Mrs. Sophia Gallaudet, the youngest son and the widow of Dr. Gallaudet, of Hartford, as superintendent and matron of the new Institu-

tion. Mr. Gallaudet had been for eighteen months an instructor in the Hartford school. On the 13th of June, in temporary buildings provided by the liberality of Mr. Kendall, the school was opened with five pupils. In the spring of 1859 Mr. Kendall added to his former benefactions by erecting a substantial brick structure, and deeding this, together with two acres of ground, to the Institution. The total value of his gifts to the Institution amounted to about $13,000. In 1862 Congress appropriated $9,000 for the enlargement of buildings, and by this act enabled the Institution to provide fully for the education of the deaf and blind of the District.

In their report for 1862 the directors laid before Congress a proposal for the enlargement of the scope of the Institution by the establishment of a collegiate department, which might afford the deaf of the country an opportunity to engage in the higher courses of study open to other youth in colleges. The desirableness of providing a college for the deaf had been urged for several years by prominent instructors, foremost among whom was the Rev. Wm. W. Turner, for many years an instructor in the Hartford Institution, and for ten years its principal. Congress acted favorably on the suggestion of the directors of the Columbia Institution, and in 1864 passed an act authorizing the board to confer collegiate degrees. An addition of $3,100 was made to the annual grant of Congress for the support of the Institution, and the sum of $26,000 was appropriated to enlarge the grounds and buildings.

The collegiate department, under the name of the *National Deaf-Mute College*, was publicly inaugurated June 28, 1864—the honorary degree of Master of Arts being conferred on John Carlin, to whom reference has been made. Mr. Carlin delivered an oration on this occasion, as did also the venerable and distinguished deaf-mute, Laurent Clerc, M. A., who had assisted the elder Dr. Gallaudet in organizing the Hartford school. At the same time Edward M. Gallaudet, who had filled the office of superintendent of the Institution from its opening in 1857, was installed as president of the corporation and of the board of directors.

The development of the College for the Deaf, still the only one in the world, has been most gratifying. Opening with 7 students in September, 1864, it had during the last year reported 48, representing 26 States and the Federal District. More than 300 young men have availed themselves of its advantages,

leaving its walls to enter upon lives of usefulness as teachers, editors, lawyers, farmers, business men, specialists in science, and officials in government departments. Private benevolence in the cities of Washington, Philadelphia, Boston, and Hartford, Conn., responded liberally to appeals in behalf of the College in its early days, upwards of $15,000 having been contributed in these cities by individuals. Congress has supplemented these private benefactions by liberal appropriations for buildings and grounds, besides granting an annual sum for the payment of the salaries of the professors and for the assistance of students unable to meet their own expenses. An able faculty of seven professors affords the students an opportunity of pursuing study in the several courses usually open in colleges. The primary department of the Columbia Institution, which in 1885 received the name of the Kendall School, has flourished, although its numbers are naturally small.

The department for the blind, organized when the institution was opened in 1857, and never containing more than ten pupils, was discontinued in 1865, Congress making provision for the education of the blind of the District in the Maryland Institution at Baltimore.

During the first half century of deaf-mute education the method pursued was, with very inconsiderable exceptions, that derived by the elder Dr. Gallaudet from the Abbe Sicard in Paris. This was the manual, which is well described by Professor E. A. Fay as "The course of instruction which employs the sign-language, the manual alphabet, and writing as the chief means in the education of the deaf, and has facility in the comprehension and use of written language as the principal object. The degree of relative importance given to these three means varies in different schools, but it is a difference only of degree, and the end aimed at is the same in all. If the pupils have some power of speech before coming to school, or if they possess a considerable degree of hearing, their teachers usually try to improve their utterance by practice; but no special teachers are employed for this purpose, and comparatively little attention is given to articulation."

Prior to the year 1867 the importance and feasibility of teaching deaf-mutes to speak orally had been urged by several American writers, notably by Horace Mann, who made a tour of Europe in 1843, when he visited some of the German schools for the deaf, in which articulation was the prominent feature. Mr. Mann

urged the superiority of the German method over that pursued in America. His report excited so much interest that the Hartford and New York schools sent gentlemen abroad, who visited many schools where the oral method was practised. They reported that the manual method produced better results than the oral. Some little effort was, however, made to teach articulation to semi-mute and semi-deaf pupils; but this was not long continued. Although the suggestions of Horace Mann led to no immediate practical result, they were not forgotten. Dr. Samuel G. Howe, the distinguished teacher of the blind, (still better known as the instructor of the blind deaf-mutes, Laura Bridgman and Oliver Caswell,) was Mann's travelling companion in Europe in 1843, and shared his views as to the importance of oral teaching for the deaf. In 1864, seconded by Mr. Gardiner Green Hubbard, of Cambridge, one of whose children was deaf; by Frank B. Sanborn, and others, Dr. Howe made an effort to secure the incorporation of an oral school for the deaf in Massachusetts. This was successfully opposed by the friends of the Hartford school, in which the beneficiaries of Massachusetts were then educated, on the ground that for the mass of deaf-mutes, if one method were to be chosen to the exclusion of the other, which was what the oralists urged, the manual method would accomplish the most beneficial results. The controversy between these two parties was brought to an end, as many a similar struggle has been, by the discovery that each was demanding too much, and that a *juste milieu* of practicability could be found. In the autumn of 1864 Miss Harriet B. Rogers, a sister of the lady who, under Dr. Howe's direction, taught Laura Bridgman and Oliver Caswell, undertook to teach a deaf-mute child to speak. Meeting with encouraging success, she advertised in November, 1865, for other pupils, limiting the number to seven. In June, 1866, she opened her school at Chelmsford, Mass., with five scholars. In 1866 and 1867 the board of State charities, of which Dr. Howe was chairman, and F. B. Sanborn secretary, continued to press the importance of oral teaching for the deaf upon the attention of the legislature of Massachusetts. At this juncture John Clarke, Esq., of Northampton, Mass., proposed to contribute towards the endowment of a school for deaf-mutes in Massachusetts. His generous offer was communicated to the legislature by Gov. Bullock in January, 1867. In June following the Clarke Institution for the Instruction of Deaf-Mutes,

at Northampton, was incorporated, and organized on the 15th of July with G. G. Hubbard as president. Miss Rogers, of Chelmsford, accepted an invitation to take charge of the new institution, and, having transferred her pupils to Northampton, the Clarke Institution was formally opened Oct. 1, and at the date of the first annual report—Jan. 21, 1868—had 20 pupils. The purpose, as to method and scope, as to the kind of pupils desired, of the Institution, was made clear in the first report: "The Clarke Institution differs from all other American institutions [for the deaf] in this, that it receives pupils at as early an age as they are admitted in our common schools, and in teaching by articulation and lip-reading only." "This Institution is especially adapted for the education of the semi-deaf and semi-mute pupils, but others may be admitted."

The success of the Clarke Institution has been marked in every particular. Never having claimed to be able to teach *all* deaf-mutes to speak and read from the lips, it has developed the speech of the semi-deaf and the semi-mute, besides imparting the power of speech to many congenital deaf-mutes in a very satisfactory manner. The endowment of the school by Mr. Clarke was munificent, and in 1877 the value of its real and personal estate was reported to be over $350,000. The number of its pupils in December, 1885, was 89.

In the city of New York during the year 1866 Mr. Bernhard Engelsmann, who had had several years' experience as an instructor in the Hebrew (oral) School for the Deaf in Vienna, undertook to instruct a few deaf-mute children by the German or oral method. The parents of these children, together with a number of prominent Hebrew gentlemen of the city, met on Feb. 27, 1867, at the residence of Mr. Isaac Rosenfeld with the purpose of extending the advantages of Mr. Engelsmann's school to the children of parents who might be unable to pay the necessary expenses. So promptly were measures taken for the raising of funds that Mr. Engelsmann's school, under a formal organization, was opened with ten pupils on March 1, 1867, at No. 134 West Twenty-seventh street, antedating the opening of the Clarke Institution by exactly seven months. The school, which was sustained wholly by private subscriptions and the payment of tuition by parents until 1870, was not incorporated, however, until Jan. 11, 1869. In 1870 the legislature of New York provided for the education of beneficiaries in the Institution on the same terms and conditions as those

prescribed for the old New York Institution, making also a special appropriation to enable the Institution to prepare for the reception of State and county pupils. In 1871 another special appropriation, this time of $25,000, was made by the legislature. Mr. Engelsmann was succeeded in 1869 by Mr. F. A. Rising, and he in 1873 by Mr. D. Greenberger, who, like Mr. Engelsmann, had been a teacher in the Hebrew School for the Deaf at Vienna.

The growth of the Institution has been rapid and healthy. The number of pupils reported as present in December, 1885, was 161. The permanent buildings of the Institution, erected at a cost of $134,904.53, on Lexington Avenue between Sixty-seventh and Sixty-eighth streets, were formally dedicated Nov. 29, 1881.

Still a third event, which gave an added and most influential impetus to the movement in favor of oral teaching, occurred during the year 1867. The directors of the Columbia Institution at Washington, having their attention called to the movements on foot in Massachusetts, in behalf of the oral method, and the persistent assertions there made that the oral method was to be preferred to the manual, which claims were stoutly disputed by the authorities of the Hartford Institution, decided to send their president, Edward M. Gallaudet, LL. D., to Europe, for the purpose of making a thorough examination of all the methods pursued in that part of the world. President Gallaudet spent six months abroad, and visited about forty institutions, including in his tour all the countries of Europe except Spain, Portugal, Greece, and Turkey.

In his report to the board of directors, Oct. 23, 1867, President Gallaudet took very different ground with reference to the oral method from that maintained by the gentlemen who had been sent out by the New York and Hartford schools some twenty years before. Giving the preference, as his father did, to the manual method, if the whole body of the deaf are to be restricted to one kind of instruction, he admitted the practicability of teaching a large proportion of the deaf to speak and to read from the lips, and advocated the introduction of articulation as a branch of instruction in all the schools of this country. Influenced by the recommendations of President Gallaudet, the directors of the Washington Institution authorized the calling together of a conference of the principals of all the American schools for the deaf, to be held at Washington in the spring of

1868. In response to this invitation the principals of fifteen institutions out of the twenty-five then existing in the country, together with one vice-principal and two ex-principals, (Drs. Peet and Turner,) met on May 12, 1868, and remained in session five days. Many subjects of interest and importance to the cause of deaf-mute education were considered by the Conference, that of articulation occupying a prominent place. After full discussion the following was unanimously adopted:

Resolved, That in the opinion of this Conference it is the duty of all institutions for the education of the deaf and dumb to provide adequate means for imparting instruction in articulation and in lip-reading, to such of their pupils as may be able to engage with profit in exercises of this nature.

The action of this Conference, taken in connection with the establishment at about the same time of the oral schools at Northampton and New York, gave a great impulse to the cause of the oral teaching of the deaf of America.

In nearly all the large schools, and in many of the smaller ones, classes in articulation were soon formed. So rapidly has this branch of instruction found favor in this country, that to-day, among the sixty-four schools, only ten are to be found where speech is not taught. And these ten schools contain only 430 pupils out of the 7,801 that were under instruction during the year 1885. The strictly oral schools are eleven in number, and had in that year 583 pupils. It will be seen, therefore, that at the present time a majority of the schools in this country sustain the combined system, and that this latter class of schools includes more than six-sevenths of the whole number of pupils under instruction during 1885.

The distinctive features of the "manual method" have already been given. For a brief and clear explanation of the other two, we quote again from Professor Fay in the *American Annals of the Deaf and Dumb*, (January, 1882:)

By the *oral method* is meant that in which signs are used as little as possible; the manual alphabet is generally discarded altogether; and articulation and lip-reading, together with writing, are made the chief means as well as the end of instruction. Here, too, there is a difference in different schools in the extent to which the use of signs is allowed in the early part of the course; but it is a difference only of degree, and the end aimed at is the same in all.

The *combined method* is not so easy to define, as the term is applied to several distinct methods, such as (1) the free use of both signs and articulation, with the same pupils and by the same teachers, throughout the course of instruction; (2) the general instruction of all the pupils by means of the manual method, with the special training of a part of them in articulation and lip-reading as an accomplishment; (3) the instruction of some pupils by the manual method and others by the oral method in

the same institution; (4)—though this is rather a combined *system*—the employment of the manual method and the oral method in separate schools under the same general management, pupils being sent to one establishment or the other, as seems best with regard to each individual case.

In conclusion, it may be stated that in no country of the world is the education of the deaf so well provided for as in the United States, and in no country have public appropriations in aid of this object been as liberal as in our own.

EDWARD M. GALLAUDET, PH. D., LL. D.,
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NOTICES OF PUBLICATIONS.

CONGRÈS NATIONAL pour l'amélioration du sort des sourds-muets. Congrès de Paris, tenu du 15 au 20 Septembre, 1884. [National Convention for the Amelioration of the Lot of Deaf-Mutes, held at Paris, France, from the 15th to the 20th of September, 1884.] Paris: Avenue de Villiers, 94. 1885. 8vo, pp. 267.

A full stenographic report of the Paris Convention of 1884, at which several valuable papers were read and important discussions were held. Mr. Dupont's synopsis of the proceedings was noticed in the *Annals*, vol. xxx, p. 229.

CONSTITUTION AND BY-LAWS of the Literary Society of the National Deaf-Mute College, Revised and Approved November 10, 1885. Washington: Gibson Bros. 1886. 24mo, pp. 20.

One of the means of education and training to which the students of the National College justly attach high value is the Literary Society, which is carried on by themselves entirely independently of the Faculty. Its aims, as stated in the Preamble to the Constitution, and successfully carried out in practice, are "improvement in composition and oratory, readiness in debate, and the formation of a library of first-class literature."

DE CANDOLLE, ALPH. Sur la Production par Sélection aux États-Unis d'une Race de Sourds-Muets, d'après M. Alex. Graham Bell. [On the Production by Selection in the United States of a Race of Deaf-Mutes, according to Mr. Alex. Graham Bell.] (Extracted from the *Archives des Sciences physiques et naturelles* for January, 1886. Third period, vol. xv, p. 50.) Geneva. 1886. 8vo, pp. 14.

The distinguished author of this paper accepts as conclusive Dr. Bell's statements and views of the danger of the formation

of a deaf variety of the human race; attaches even more importance than Dr. Bell (who attached far too much) to the absurd proposal of thirty years ago to establish "a deaf-mute commonwealth," which Mr. De Candolle thinks we are in danger of seeing renewed "unless Mr. Bell's memoir sufficiently enlightens the American public;" coincides with Dr. Bell as to the preventive measures desirable, (special classes in connection with hearing schools near the pupils' homes, the adoption of the oral method, and the diffusion of information concerning the danger of the marriage of the deaf with one another and with persons having deaf relatives,) and advises, in addition, the separation of the sexes in school wherever the number of deaf children in a town is large enough to render this practicable, better hygienic treatment of all children at birth, thus lessening the frequency of diseases that cause deafness, and the prohibition by law of consanguineous marriages. He admits that the measure last named is opposed to the idea of personal liberty, but—seeing how we in the United States disregard the individual rights of Chinese immigrants, Mormons, and drunkards—he thinks that we probably have less concern here for personal liberty than prevails in Europe!

Mr. De Candolle's views of the superior results of the exclusively oral method go beyond Dr. Bell's:

> The exclusive method of articulation is difficult, but it puts the pupils into real and almost complete relations with other men. It develops in them the spirit of observation and sagacity. It permits them to understand everything that is said and written in the world. It prevents, also, the antipathies and the distrust caused in the public by the silence and the uncouth gestures of deaf-mutes who use signs.

He adds, however, that the English language is the least favorable of all to the oral method:

> Of the principal European languages, English is the one least articulated, and in which the movement of the lips is most often replaced by an accentuation or intonation which is heard but cannot be seen. It is also the language in which the vowels are the least clear, the least articulated. It has many intermediate sounds between *ă* and *ā*, between *ŏ* and *ŭ*, etc. It requires very little opening of the mouth or movement of the lips. It is the opposite of the Italian. We have in French some words impossible to read upon the lips, as *de* and *crac*, but they are few, and we have not the English *th*, which is pronounced with the tongue against the teeth, nor the aspiration of the *h*, which is made in the back of the mouth. I had the pleasure of knowing a deaf-mute of infinite talent, great intelligence, and much learning, who could read the lips of any one in French

and German.* It was even asserted that he could distinguish in a mirror and at a distance the words of one who had his back to him. Since he could understand what was said in a whisper, ladies had a certain fear of him when he entered a drawing-room. "I know English," he said to me, "but in order that I may understand it, when spoken, one must show me the in-ide of his throat!" These difficulties will probably retard the introduction of the oral method in America, and, perhaps, will render necessary the retention of signs as a supplement to articulation, but the difficulties are not insurmountable.

Concerning the hygienic treatment of infants at birth, Mr. De Candolle says:

The persons called to care for new-born children, and the men of skill who advise them, do not, perhaps, regard sufficiently the indications furnished by a simple observation of facts. Do we not see all young animals press themselves against their mothers or conceal themselves under their wings, unless, as the marsupials, they enter into a pocket? The sudden change from the environment of a high and constant temperature to the cold and variations of the atmospheric air is a violent crisis for new-born children. Except the baptism by immersion practised in Russia, there is nothing more dangerous. It often causes death, and often also catarrhs, which result in blindness or deafness. If these terrible affections were reduced to the cases of organic defects and of accidents which may happen at any age, they would certainly be less frequent.

FOSTER, Mrs. HARRIET MACINTIRE, and Others. In Memoriam. A Tribute to the Memory of Thomas MacIntire. 1885. 8vo, pp. 36.

A reprint of the biographical sketch and reminiscences of Dr. MacIntire, published in the last number of the *Annals*, with the addition of the funeral service, the resolution adopted by the Executive Committee of the Convention of American Instructors, and the minutes of the church at Indianapolis, of which he was for many years a ruling elder.

GORDON, JOSEPH C., M. A. Practical Hints to Parents of Young Deaf Children Concerning Preliminary Home Training. Washington: Gibson Bros. 1886. 8vo, pp. 44.

This is a reprint of the admirable lecture given before Dr. Bell's "Parents' Class" last June and published in the *Annals* for October, 1885, revised and enlarged so as to include the paper entitled "Notes on Manual Spelling" in the *Annals* for January, 1886, an Index, and much other valuable matter. A

* The Baron of Gingins-Lassaraz, the author of interesting works on botany and on history.

memorial page is dedicated to Francis Green, "the first promoter of the education of the deaf in America."

Copies of this pamphlet for distribution to parents of young deaf children and others interested may be obtained by addressing Dr. F. L. Radcliffe, 1221 Connecticut avenue, Washington, D. C.

LA ROCHELLE, ERNEST. Congrès administratif francais de 1885 dans l'interêt des sourds-muets. Examen critique. [A Critical Examination of the French Administrative Convention of 1885 in the Interest of Deaf-Mutes.] Paris: Saint Jorré. 1886. 8vo, pp. 44.

Mr. La Rochelle is not a teacher of the deaf, but he is an active promoter of the Péreire School in Paris, and has been prominent in all the French and International Conventions of recent years. He does not like the way in which the Convention held in Paris last year* was conducted, and in this pamphlet tells us why. He complains that it submitted far too much to the dictation of Mr. Claveau, who represented the Minister of the Interior; that the members of religious bodies, of whom the Convention was largely composed, voted on all questions in a mass "and with the docility which characterizes them" at the behest of their superiors; that freedom of speech was not allowed; that the object of the great amount of voting by ballot, to which we referred in our notice of the Convention, was to fill up the time and prevent discussion, etc., etc. We can not judge fully at this distance as to the merits of the case, into which questions of religion and politics enter largely; but on general principles the transfer of the supervision of deaf-mute education in France from the Minister of the Interior to the Minister of Public Instruction, which Mr. La Rochelle advocates, seems a consummation to be desired and in accordance with the spirit of the age.

PERIODICALS. The English periodical of which we gave a preliminary notice in the last number of the *Annals* was begun in January of the present year. It is entitled *Quarterly Review of Deaf-Mute Education*, and is edited and issued under the direction of Messrs. D. Buxton, R. Elliott, J. Howard, W. Neill, S. Schontheil, W. Sleight, W. Stainer, and W. Van Praagh. It contains 32 pages of about the same size as those of the *Annals*.

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*See the last number of the *Annals*, page 76.

The first number has an excellent Salutatory signed by all the members of the Editorial Committee: a valuable paper on Lip-Reading by Mr. Van Praagh, in which he asserts that deaf children properly trained can recognize the difference between such "homophenes" as "coat" and "goat," "pear" and "bear," "to" and "do," when spoken singly; an anonymous article describing the origin and history of the new College of Teachers; interesting notes on "Statistics, Leading and Misleading," by Dr. Buxton; a reprint from the *Annals* of Dr. Buxton's biographical sketch of Mr. Patterson; Items, and Notices of Publications. We hereby give notice that while we shall still welcome any contributions or items our English brethren may send us, we do not expect to reprint articles from the *Review* in the *Annals*, however good they may be, and we presume the *Review* editors will not wish to reprint from us; we therefore recommend all our readers to subscribe for the *Review*. The price is five shillings (about $1.25) a year; subscriptions may be addressed to the Publishers, Stainer House, Paddington Green, London, W., England, or to any member of the Editorial Committee.

The title of the *Revue Bibliographique* (see the *Annals*, vol. xxx, p. 294) is changed at the beginning of its second year to *Revue française de l'éducation des sourds-muets, et Bibliographie internationale de cet enseignement et des sciences qui s'y rattachent*. The scope of the journal will be correspondingly enlarged. Mr. Van Praagh, the English editor, requests us to inform our readers that he will be happy to receive any new works or reprints, either for announcement or review in this periodical. His address is No. 12 Fitzroy Square, London, W., England.

PROCEEDINGS OF THE CONFERENCE OF HEAD MASTERS OF INSTITUTIONS, and Other Workers, for the Education of the Deaf and Dumb, held at the rooms of the City and Guilds of London Institute, South Kensington, on Wednesday, Thursday, and Friday, July 1st, 2d, and 3d, 1885. London: W. H. Allen & Co. 1886. 8vo, pp. 127.

A report of this Conference, taken from the London *Times*, was published in the *Annals*, vol. xxx, pp. 280–284. The present much fuller and more accurate Report is very interesting, and should be carefully read by every one who wishes to understand the present state of deaf-mute education in Great Britain. Accompanying the Report is a tabular statement of

the public schools for the deaf in the United Kingdom for the year 1885. It gives 36 schools, containing 2,908 pupils, with 240 teachers.

REPORTS OF SCHOOLS, (published in 1883:) Yorkshire, (Doncaster, England.)
(—— published in 1884:) Glasgow, (Scotland,) and Yorkshire.
(—— published in 1885:) Horace Mann, Glasgow, Maryland, Maryland Colored, New Jersey, Rotterdam, South Carolina, Tennessee, Western New York, Yorkshire.
(—— published in 1886:) Bristol, (England,) Kentucky, Le Couteulx St. Mary's, Lyons, (France,) New York, Ontario, Philadelphia Private, Western New York.

RILEY, F. C., M. D. Hearing and Deafness. (Reprint from *New England Medical Monthly* of Nov. 15, 1885.) Printed at the New York Institution for the Deaf and Dumb. 32mo, pp. 15.

Dr. Riley, who is Consulting Ophthalmologist and Otologist to the New York Institution, presents in this paper some facts concerning the deaf, not unfamiliar to most readers of the *Annals*, but little understood by even the more intelligent portion of the general public. He gives in detail the result of Mr. Currier's experiments with the semi-deaf, reported in the *Annals* for January, 1885, and urges the importance of greater and more intelligent attention on the part of physicians to the oral diseases of infancy, inasmuch as it is less noble to cure than to prevent.

SYLE, Rev. HENRY WINTER, M. A. A Retrospect of the Education of the Deaf, on the occasion of the Clerc Centennial Commemoration, December, 28th, 1885. With numerous illustrations engraved by Wm. R. Cullingworth. Philadelphia: Wm. R. Cullingworth. 8vo, pp. 36.

Mr. Syle, as author, and Mr. Cullingworth, as engraver, are preparing "an historical album of the education of the deaf," and this pamphlet is published as an *avant-courier* of the work. It presents an interesting sketch of the development of the education of the deaf up to the present time, giving—doubtless in view of the occasion for which it was published—special prominence to the labors of Mr. Clerc, and to the Pennsylvania Institution. It has numerous excellent illustrations, consisting of manual alphabets, portraits, and buildings. Some of these are taken from the *Annals;* others we have Mr. Cullingworth's permission to reproduce in the future.

TURNBULL, LAURENCE, M. D. Progress of Otology. (Reprinted from the Medical and Surgical Reporter of January 23, 1886.) 8vo, pp. 4.

Dr. Turnbull, who is known to our readers by his "Diseases of the Ear" and other publications reviewed in the *Annals* from time to time, in this paper discusses heredity, methods of instruction, etc., but presents little that is new. Like Mr. De Candolle, he calls attention to the danger of deafness in early infancy through the ignorance or carelessness of physicians and nurses:

It is an important matter that obstetricians and nurses should be carefully taught the anatomy and pathology of the ear, as the deafness of many of the so-called congenital deaf-mutes is the result of mucous or blood in their meatus or tympanic cavity at birth. Another cause is physicians not attending in time to the catarrhal deafness, the result of cold from exposure or teething. The nurse is often at fault, in placing the ears of infants in draughts of cold air, and allowing cold water to enter the meatus and pass back to the membrane, lodging there and causing acute inflammation, shown by intense pain and persistent earache, not relieved until perforation of the drum-membrane takes place or extension to the internal ear or brain.

VAUGHAN, C. J, D. D. A Plea for the Deaf and Dumb. A Sermon preached in Llandaff Cathedral, in aid of the Llandaff School for the Deaf and Dumb, January 10, 1886.

An eloquent sermon by the Dean of Llandaff and Master of the Temple from the texts:

The Lord God hath given me the tongue of the learned, that I should know how to speak a word in season to him that is weary: He wakeneth morning by morning; He wakeneth mine ear to hear as the learned. *Isaiah*, l, 4.

Be not Thou deaf unto me; lest, if Thou be silent unto me, I become like them that go down into the pit. *Psalm* xxxiii, 1, (R. V.)

E. A. F.

SCHOOL ITEMS.

American Asylum.—Mr. Jared A. Ayres, for many years a valued instructor in this school, died at his home in Mystic, Conn., on the 24th of February last, at the age of 72 years. A biographical sketch will be given in the next number of the *Annals*.

Arkansas Institute.—Miss Emily Wells, a graduate of the New York Institution, has been added to the corps of instruction.

Ealing Training College and School.—In addition to the honors mentioned in our last number, the Executive Council of the International Health Exhibition, 1884, have awarded a diploma of honor to Mr. Kinsey "for services rendered." Mr. Kinsey was elected honorary secretary to one of the juries on education, and received a letter of thanks signed by H. R. H. the Prince of Wales, who paid the Ealing Society the honor of a visit to their exhibit, on the occasion of the opening of the City and Guilds of London Technical Institution.

Genoa (Italy) Institution.—The Abbe Boselli, long at the head of this Institution, died in January last at a very advanced age. A correspondent of the Philadelphia *Evening Bulletin*, writing from Rome, says of him:

> The Abbe Boselli was one of the pioneers in this country for improving and simplifying all modes of communication with those afflicted ones, and consequently opening up to them infinitely numerous chances of education and employment. He had the satisfaction of knowing that his good work bore fruit during his lifetime.

Le Couteulx St. Mary's Institution.—A branch house has been established in the country, about two-and-a-half miles distant from the main Institution. It is occupied by the younger children, who are thus separated from the older pupils, and have the benefit of country life.

Margate (England) Asylum.—At the meeting for the distribution of prizes held on the 25th of December last, Mr. Charles Few, the treasurer, who presided, announced that after five years' experience with the oral method the Committee had decided to adopt it for all the pupils who were capable of profiting by it. Those who were not thus capable would be taught as formerly by the manual method. Mr. Elliott, the head-master, also made an address, in which he expressed the conviction at which he had gradually arrived, that the oral method was the best for the majority of deaf-mute children, but deprecated the excessive claims put forth by some of its advocates that it practically gives hearing and speech to the deaf. If the children could be taught to read the lips of ordinary persons when they speak slowly and plainly, and in return to speak so as to be understood, he thought a very great task

would have been performed and all that could reasonably be expected.

Minnesota School.—The *Companion*, since Mr. Wing's retirement, has been ably and successfully conducted by Mr. James L. Smith, who succeeds Mr. Wing in the class-room also.

New York Institution.—Dr. Peet has been elected president of the Medico-Legal Society of New York, before which, in the year 1871, he read a paper of unusual value on the "Psychical Status and Criminal Responsibility of the Totally Uneducated Deaf and Dumb," reprinted in the *Annals*, vol. xvii, pp. 65–94.

Washington (Territory) School.—Miss Etta P. McWhorter, who was associated with Mr. McFarland as teacher in the beginning of this school, died at her mother's home at Albert Lea, Minn., in February last. Miss McWhorter was teacher of articulation in the Minnesota School last year, and the *Companion* says of her that "she was thoughtful, conscientious, and efficient, and won the confidence and esteem of all her associates."

Mr. McFarland sends us the following account of recent legislation concerning this school:

An act of the Legislature of Washington Territory was approved by the Governor on Feb. 3d, establishing "The Washington School for Defective Youth," "free to all resident youths of Washington Territory too deaf, blind, or feeble minded, to be taught by ordinary methods in other public schools." The act fixes the location at Vancouver, W. T., and appropriates $7,500 to pay running expenses, from Jan. 1, 1886, to June 30, 1888, being $3,000 a year. The salary of the director is fixed by law, at $900 for the first year, with annual increase of $100 up to $1,500. He is to "reside in the school, and be furnished quarters, heat, light, and food."

The qualifications of the director are specifically and minutely detailed, and effectually prevent political incompetents from ever invading the school. The duties of the director are stated with equal clearness, and prevent injudicious interference of inexperienced trustees with details of inside management. The trustees, five in number, are appointed by the Governor, in classes of two, two, and one, to serve respectively two, four, and six years. Biennial appointments (corresponding to the biennial meeting of the Legislature) fill vacancies by expiration, and so preserve a rotation.

I am elected director, and my class at Tacoma will be moved to Vancouver as soon as a building can be prepared. Vancouver is expected to

furnish land and building, and steps have been taken in that direction. A commission is to find a site and report to the Governor before March 4.

Western Pennsylvania Institution.—Mr. Balis favors us with the following items:

Miss S. McCready retired from the matronship in January, Miss M. A. Clemens, of Dixmont, Pa., succeeding to that office. Miss Fannie Howells, of Ohio, has been appointed articulation teacher, *vice* Miss Kirkland, resigned. Owing to the increased attendance, Miss Mary Noyes, of Ohio, has been added to the corps of teachers.

The girls' wing will be completed this summer, in order to accommodate the expected increase of pupils in September next.

A plan for ascertaining the number of uneducated deaf in Western Pennsylvania, suggested by Mr. J. H. Brown, instructor of the High Class, has been carried out with most gratifying success so far. It is as follows: A list of teachers for each county was obtained from the Superintendent of Schools, with their post-office addresses. A circular was mailed to each teacher, with a stamped envelope addressed to the principal of this Institution for return.

The teacher made inquiries of pupils in his or her school as to whether there were any deaf-mutes in that section; noted the deaf child's name, age, and the post-office address of its parents on the circular, and returned it to the Institution.

When these names were received, a pamphlet relating to this school, a report, and a blank application were mailed to the parents.

The results were as follows:

Number of circulars sent out	3,595
Number of counties canvassed	15
Number of counties yet to be canvassed	14
Names returned, exclusive of duplicates, to date	230

As follows:

Already in school	12
Under 8 years of age	46
Between 8 and 20	109
Over 20	43
Age not given	20
	230

Mr. Balis adds that the officers of the Institution expect at least 150 new pupils in September, or about 260 altogether.

E. A. F.

THE BUILDINGS OF THE FLORIDA INSTITUTION.

The buildings of the Florida Institution are three in number. They are built in a line, at a distance of about 33 feet apart, and front within a few degrees of due north. All have broad piazzas, and in many respects may be taken as typical Florida houses. They are two stories in height. All are neatly plastered within. Outside, the painting is ash-gray, with salmon trimmings. The sash and shutters are of a red-brown or russet color. The ceilings of the piazzas are of a pale blue tint, approaching leaden. With the location and surroundings, these colors give a soft and pleasing effect.

The central building is for the officers. It has a frontage of 24 feet and a depth of 38 feet, exclusive of the piazza and verandah, front and rear. This building contains five rooms and linen and cloak closets. The entrance and stairs are at the left, as one approaches. The two rooms to the right, on the first floor, are the parlors. These each have a door opening from the hall, which runs the length of the building, and they communicate with each other by large sliding doors. The rear parlor and the room above have each a bay window. The frames, mouldings, etc., on the first floor, are of varnished yellow pine; the stair-railing of walnut. The rooms above correspond with those below, except a small one at the head of the stairs. Beneath these, the linen and cloak closets are located. The dimensions of the rooms are 15 × 18 feet and they are 12 feet high in the clear. The doors at the ends of the hall, and in fact the outer doors of all the buildings, have glass panels. A square dome surmounts this building, and from it a very fine view of the city, bay, ocean, light house, etc., can be obtained.

For heating purposes the central building is provided with open fireplaces; but both the others have stoves.

Rush carpeting is on the floors of all the buildings.

A neat plank walk leads from the gate directly to the steps of the middle building. There are lateral branches running in a diagonal direction, from near the gate to the steps of the front school-rooms. These steps are back one-fourth the length of each building from the front.

Directly in the rear of the centre building proper the dining-room and kitchen wing is located. It is a one-story structure, 21 × 50 feet, the rooms being of about the same height as the

others; a chimney and partition wall separates one from the other. The storage rooms are at the rear of the kitchen. A verandah in front of the dining-room is separated from a similar one in rear of the front structure by a distance of about seven feet. This is bridged on one side. In the centre of this space is a hemispherical cistern of brick and cement, which collects the water from the roof by means of gutters. A similar cistern is located at the corner of each of the side buildings, respectively, near the dining-room. But the Institution is not dependent upon these for the water supply: an artesian well, of excellent sulphur water, is within a hundred yards of the grounds.

From the sides of the dining-room verandah plank walks are laid directly to the steps of the rear school-room on either side.

The buildings that flank the central one are counterparts of each other, with the exception of the arrangement of the piazzas and stairs. The piazza of the east building extends along the ends and the west side; that of the west structure, along the ends and the *east* side. The lower story of each is divided into two school-rooms. The dimensions of each room, in the clear, are 30 ft. 9 in. × 30 ft. 9 in. and 12 feet in height. A row of pillars along the centre supports the upper story. The walls are slated to the proper height. The stairs are outside and at the ends of the buildings. They are four feet ten inches from the body of the house. They ascend from the lower, through the floor of the upper piazza, close to the door at the end of the halls. The rooms are ranged on each side of the hall. A partition wall runs across the hall, thus separating the sexes. Six dormitories are in each end of the building—three on either side the hall. The size of these rooms is, each, 12 × 10 ft., and they are 10 ft. 7 in. in height. The two buildings are to separate the races.

The location of the Institution is about a mile due north of the old city gates and just one square from the "Shell Road"—the continuation of St. George street. This location is, on the whole, the best that could have been obtained anywhere in the neighborhood of St. Augustine.

THOMAS H. COLEMAN, B. A.,
Ridgeway, S. C.

CALL OF THE ELEVENTH CONVENTION.

NATIONAL DEAF-MUTE COLLEGE,
KENDALL GREEN, NEAR WASHINGTON, D. C., *March* 22, 1886.

At the Tenth Convention of American Instructors of the Deaf and Dumb, held at Jacksonville, Illinois, August 26–30, 1882, the following resolution was adopted:

Resolved, That all invitations for the entertainment of the next Convention be referred to the Standing Committee, who are hereby authorized to take all necessary action in the premises.

At a meeting of the Committee held in New York, December 10, 1885, a communication was presented from the Board of Directors of the California Institution for the Education of the Deaf and Dumb and the Blind, through Mr. Warring Wilkinson, Principal, inviting the Convention to meet in Berkeley, at their Institution, during the summer of 1886.

An invitation was also presented from the Board of Trustees of the Iowa Institution for the Education of the Deaf and Dumb, through Mr. Henry C. Hammond, Superintendent, offering the hospitalities of their Institution to the Convention.

On taking the sense of the Committee, a disposition to accept the invitation to California proved to be unanimous. In consideration of the several invitations to California which had come before the Committee in former years, and which they had felt compelled to decline, it was with especial satisfaction the Committee recognized the fact that nothing now stood in the way of accepting the proffer of hospitality so generously renewed, and of which very many members of the profession had long desired to avail themselves.

Notice is accordingly hereby given that the Eleventh Convention will be called to order in the California Institution on Thursday, the fifteenth day of July, 1886.

An invitation is extended to all persons engaged in the education and religious instruction of the deaf in America to be present at this Convention; and it is suggested to the principals of the several schools that they invite such persons as may have been instructors, or are for other reasons interested in deaf-mute education, as might, in their judgment, properly participate in the proceedings of the Convention in the capacity of honorary members.

By order of the Convention, the Committee recommend to

the writers of papers to observe the limit of twenty minutes, and it will be required that no paper shall exceed thirty minutes in its delivery; also. that an abstract, not to exceed one page. be furnished to the Business Committee of the Convention on the first day of the meeting.

The Committee request that early notice may be given of intentions to present papers, titles being forwarded to Mr. Warring Wilkinson, who has been appointed Local Committee of Arrangements, to whom also due notice should be given by the delegates of their purpose to attend the Convention.

At the suggestion of Mr. Wilkinson, the officers of schools for the deaf are invited to send to the Convention specimens of their pupils' school, art, and industrial work, for the exhibition of which suitable provision will be made in a room of the California Institution. Only the work of the deaf is desired.

A suggestion offered by Mr. C. W. Ely, of Maryland, in the form of a resolution adopted at the last Convention, and more recently in the *Annals* for January, 1886, that provision be made for the formation of sections of the Convention for the study of special subjects, was favorably considered by the Committee, and Mr. Ely has consented, at the request of the Committee, to take charge of this department. All persons interested in this new departure in the work of the Convention are requested to communicate directly with Mr. Ely at Frederick, Md.

Dr. Gillett and Mr. Wilkinson were appointed a Committee to arrange for transportation at reduced rates, to suggest routes of travel, and to report thereon by means of circulars to all persons likely to attend the Convention.

In behalf of the Committee.

E. M. GALLAUDET,
Chairman.

MISCELLANEOUS.

The Civil Service Requirements.—The Brooklyn *Eagle* of January 31, 1886, devotes two columns to correspondence between Mr. W. A. Bond of that city, and various city, State, and national officials, concerning the admission of deaf-mutes to the civil service, from which they have been supposed by some persons to be debarred by the conditions of application for admission. The conclusion of it all, so far as the civil service of the United States is concerned, is precisely as stated in the *Annals* for October last, (vol. xxx, page 300,) viz., that there is no provision in the Civil Service Act or Rules which prevents either the examination or the employment of deaf-mutes.

The State Civil Service Commission of New York, after consideration of Mr. Bond's communication, adopted a resolution to the effect that "the Commission is of opinion that under the rules as they now exist, a deaf-mute has the same right to apply for an examination as any other person, but if the application presented, or the certificate of the physician required by Rule 10, shows the inability of the applicant to hear or speak, or if the fact of such infirmity appears upon the examination, the applicant afflicted with one or both of these infirmities is not eligible under the rules to ordinary positions in the public service requiring ability to speak or hear. Nevertheless, if there are any positions in which the duties can be performed by a deaf-mute, the rules may be so amended as to provide for special examinations in such cases."

The Mayor of Brooklyn replied to Mr. Bond that for positions under the municipal government of that city "there is no regulation expressly preventing deaf-mutes from competition at civil service examinations, but each application for examination must be accompanied with a physician's certificate that the applicant is physically competent for the duties of the position for which he applies."

Mr. Bond's correspondence clearly establishes the fact that the national, State, and city authorities all agree in requiring the fact of deafness, if it exists, to be stated in the application for admission, but agree also in permitting deaf-mutes to receive examination for, and appointment to any positions—and there are many such—of which they can successfully perform the duties.

Compensations of Deafness.—The report of the Horace Mann School for 1885 contains the following interesting letter from a lady who lost her hearing at eight years of age, was instructed at home for several years, and was for four years a pupil in this school:

DEC. 6, 1884.

MY DEAR MISS FULLER:

My conversation with you a few days ago has made me feel more strongly than ever how important it is that people generally should have correct views on the subject of deafness. It seems to me that the tendency is to magnify the misfortune.

I have been totally deaf for twenty-five years. I was able to speak, hear, and sing long enough to appreciate to the full what I had lost. My father's death and my mother's invalid condition have forced me into many positions which ladies generally would shrink from. I have felt keenly the loss of educational advantages. If any one knows what deafness is, I do. And yet, in the face of all this, I can say it is the very smallest trial I have.

It has been my aim to act in the spirit of Henry Fawcett, a prominent Englishman, who became blind in boyhood. Long afterward he said: "I determined that my life should go on just as if I saw. Not a place, pursuit, or even amusement has been given up." So I have tried, and am daily trying to have my life go on just as though I heard. I attend church, go to concerts and lectures, and enter all kinds of society, just as others do. "But you cannot hear the music," says some one. Well, no matter; I can imagine it. I can see the performance, catch the inspiration of mingling with masses of people, and go home as much refreshed as any one. I have repeatedly asked people who had heard every word of a sermon or lecture to give me the substance of it. Not a thing could they remember! Pray tell me how much better off such people are than I am?

More than this, I believe firmly that my other senses are more acute, and that my mental faculties work more efficiently than they would if I were not deaf. It is a natural law that power is never lost, never wasted; only changed in form. The power not expended in hearing may be used in other directions, if the individual so wills.

Then think of the intellectual world opened to me. Think of the rich stores of literature, science, history, and art, which I can have by simply using my eyes and brain. Think of all this, and tell me, if you can, to be miserable!

I meet with some grand thought in my reading, and my brain takes fire. I show it to some hearing person supposed to be educated. Lo! it is nothing to him. It is "dry." Now, I do not say that the misfortune of hearing has anything to do with this want of appreciation, yet I cannot help thinking that absorption in the world of sound prevents the fullest enjoyment of the world of thought.

In most cases, when people meet a deaf person, his deafness is the one prominent point in their thoughts. "For pity's sake," I sometimes feel inclined to say, "do think of something else!" That person is deaf, it is true, but he probably has all the other senses: brain to think, heart to feel, skill to work. Do think of these things, and help him to make the

most of himself by putting all his strength into them. It is wonderful how a difficulty can be overcome by simply ignoring it. The last three months have given me unusual opportunities for transacting business of all kinds. My feeling has been, however, not one of sorrow at the disadvantage of deafness, but one of surprise that it was really so slight a drawback. I have yet to see the least disposition to ridicule or to take advantage of my misfortune. The treatment I receive is uniformly courteous.

No; my deafness shall not keep me out of the world. I will take my place there and fill it just as well as I can.

A Deaf-Mute on Methods of Instruction.—Mr. Richard Pearce, the first ordained deaf-mute clergyman in England,* has a letter advocating the manual method of instruction in the *London Globe* of February 16, 1886, from which we make the following extracts:

I am afraid that, in all the discussions that have arisen at various times, too much attention has been paid to the exaggerated statements of teachers and extreme partisans, while the views of those who are the persons directly interested are either taken little account of or contemptuously pooh-poohed. The public are naturally captivated by what they read of the marvellous results of pure oral teaching, as that it restores the deaf pupil to society; that he passes through life with his affliction almost unnoticed and unsneered at; that he feels almost (if not to himself quite) the equal of the hearing, etc. Such statements as applied to the mass of orally taught pupils are without foundation. It is found that in many cases their so-called speech is of very little real service to them. They themselves too soon discover that their discordant utterances produce the most painful impressions on many sensitive persons, and that they are far from being readily understood. They soon notice, also, how hopeless it is for them to expect to read the lips of strangers with any degree of comfort or certainty, and how little lip-reading can be depended upon for holding anything approaching connected conversation. The natural result inevitably follows, that they soon fall back upon the ordinary means of intercourse of deaf-mutes, namely, the manual alphabet and signs. Conclusive proof of this can be obtained, if inquiry be directed, not among teachers, but among missionaries and others who know the after-life of the deaf, and can, therefore, give testimony as to the relative value of the two systems of teaching in furnishing pupils with a medium of intercourse with the outside world. * * * The value of the education given to the deaf and dumb can be far more accurately gauged by general after results than by what a few pupils can be made to display before the public while they are under their teacher's eye. * * * I was myself educated exclusively on the sign and manual system, and I thankfully acknowledge how much I am indebted to it. I have not the slightest difficulty in holding communication with other persons, nor in the per-

*See the January number of the *Annals*, page 76. Mr. Pearce has recently had the honor of being received by the Queen.

formance of all the ordinary transactions and duties of every-day life—life, too, in which I am called upon to be constantly on the move from one part of the Winchester diocese to another. Scores of others educated in like manner would give similar testimony. I may add that I never yet met an orally taught mute with whom I thought I could advantageously change lots as far as readiness of communication with the hearing enters the question.

Mr. Westervelt on the Use of the Manual Alphabet.—In the Western New York Institution the attempt is made more thoroughly than at any other school within our knowledge to substitute the use of the manual alphabet for that of the sign-language, both in and out of the school-room. In his last Report, (the Ninth, 1886,) Mr. Westervelt, after a discussion in which he distinguishes clearly between pantomime and the sign-language, remarks as follows upon the manner in which the manual alphabet is used in his own school:

As usually practised, finger spelling is without expression; the attention is centered upon the letters which are given as though each letter were of individual importance. The ignorant foreigner or the small primary pupil reads his primer somewhat after this fashion, pronouncing each letter, then the syllable, then the word. Intellectual pleasure can hardly be filtered through such media.

In substituting dactylology for signs in the combined method, we have set for our school the task of spelling English words upon the fingers with such clearness and expression as that the spelled words shall attract and hold attention and interest, because of their clearness and intelligibility. This has been accomplished. In chapel exercises the pupils give close attention, and old and young show comprehension and interest. In conversation there is no lack of vivacity; the eyes are more closely fixed upon the face than upon the hand; in manual, as in oral conversation or in signs, mind converses with mind through the expression of eyes, face, and gesture, and uses words to deliver the thought with exactness. Those of our pupils who have made the greatest advancement for the time that they have been at school are those who have acquired the habit of spelling. They use words easily, naturally, often spelling with great rapidity several words as one, making only rhetorical pauses, as words are pronounced in easy and natural speech. In their spelling, frequent gestures and pantomime and conventional signs are introduced to add expression and vivacity, but not as a substitute for any portion of the sentences; every word of which is spelled, every sentence completed.

The Eleventh Convention.—Dr. Gillett, chairman of the Committee appointed by the Standing Executive Committee of the Convention to arrange for transportation at reduced rates and to suggest routes of travel to the next Convention, has

issued several circulars of information on the subject, which have been so widely disseminated that it is probably not necessary to reprint them here. The rates of fare to San Francisco and return, which the Committee have succeeded in obtaining for the members of the Convention, are exceedingly low, affording an opportunity to visit the Pacific coast, and the numerous points of interest on the two different routes proposed for going and returning, more favorable than is likely ever to occur again. There seems to be every reason to hope that the result of the peculiar attractiveness of the excursion across the continent thus offered, and of all the arrangements made for the conduct of the Convention, will be a large and profitable gathering of the members of the profession this summer. Further information concerning the Convention, if necessary, will be given in our next number, and in the meantime any one who has not received the circulars above mentioned can obtain them by addressing Dr. P. G. Gillett, Superintendent of the Illinois Institution for the Education of the Deaf and Dumb, Jacksonville, Ill.

Preliminary Home Training.—A movement has been begun in Washington to assist the parents and friends of deaf children with information and advice concerning the methods of beginning their education at home before they are old enough to go to school. As we all know, very much has sometimes been accomplished in this direction, and the same and more might be achieved in many other cases if parents and friends knew how to proceed. Dr. Bell's pamphlet, "A Method of Teaching Language to a Very Young Congenitally Deaf Child," reprinted from the *Annals*, vol. xxviii, pp. 124–139, and Professor Gordon's "Practical Hints to Parents," noticed in the present number of the *Annals*, page 149, are now ready for distribution; and funds are pledged for a supply of much other valuable material as it may be required. For the above-named pamphlets, and other information concerning the plan, our readers may address Dr. F. L. Radcliffe, 1221 Connecticut Ave., Washington, D. C.

Education in Great Britain.—A Royal Commission has been appointed to inquire into the education of the blind, and the scope of the Commission has been extended so as to include the education of the deaf and others requiring exceptional

methods. It is to be regretted, perhaps, that a Commission was not appointed for deaf-mute education exclusively, as this subject is less likely to receive the attention it deserves when combined with others; but even as it is there is reason to hope that much good will be accomplished. The Commission includes Lord Egerton of Tatton, who presided over the Conference on State Aid held at Manchester last year; Sir T. Selwyn Ibbetson, Bart., M. P.; William Woodall, Esq., M. P.; Sir Lyon Playfair, K. C. B., M. P.; B. St. John Ackers, Esq., M. P., and about a dozen other gentlemen. It is not improbable that a deputation from the Commission will visit the United States.

The Clerc Centennial.—The centennial anniversary of the birth of Laurent Clerc, the first deaf teacher of the deaf in America, was celebrated at Philadelphia, December 28, 1885. The exercises, which were held in the hall of the Young Men's Christian Association, consisted of an introductory address by Mr. Joseph Patterson, a Vice-President of the Board of Directors of the Pennsylvania Institution; devotions by the Rev. C. Miel, D. D., of Philadelphia, and the Rev. Thomas Gallaudet, D. D., of New York; an oration by Mr. John P. Walker, a teacher in the Pennsylvania Institution; the crowning of Clerc's portrait with laurel by Miss Tessie E. Glen, a graduate of the Institution; Clerc's Relations to Gallaudet, by the Rev. Thomas Gallaudet, D. D., of New York; Personal Recollections, by Professor Samuel Porter, of the National College, read by President Gallaudet; Clerc's connection with the American Asylum, by Mr. Job Williams, Principal; his connection with the Pennsylvania Institution, by Mr. A. L. E. Crouter, Principal; with Higher Education, by Dr. E. M. Gallaudet, President of the National College; and a Reply to the Addresses by the Rev. Francis J. Clerc, D. D., of Phillipsburg, Pa., son of Laurent Clerc. In the evening there was a reception at the Institution, which was largely attended.

Church Mission to Deaf-Mutes.—The trustees have purchased a farm of 156 acres on the Hudson, near Poughkeepsie, for the permanent "Home for Aged and Infirm Deaf-Mutes," hitherto carried on in New York city. The buildings comprise a mansion house, capable of accommodating 40 or 50 inmates;

a farm-house, two barns, and various out-buildings. The stock and farming utensils were purchased with the other property. It is to be occupied about April 1. The trustees have voted to call the new place "The Gallaudet Home," while the building hitherto occupied in the city will be known as "The Mission House."

Another Raindrop.—Mr. Logan writes us that he has a second volume of stories on the same plan as "The Raindrop," now in course of preparation and nearly completed. The style of the stories is equally simple, and they are perhaps more interesting than those of the former volume. If printed they will form a book of the same size and with the same type, but the magazine form will be abandoned. Mr. Logan will not feel justified in publishing the work unless each school will subscribe for an average of at least forty copies, (which will be sold at $1.50 each, bound in cloth,) that he may escape the pecuniary loss incurred in the former publication. Mr. Logan's address is 93 Fourth Avenue, Pittsburgh, Pa.

The Manual Alphabet.—The beautiful manual alphabet drawn and engraved from photographs, which was published in connection with Professor Gordon's article in the last number of the *Annals*, pp. 56–58, has been reprinted in a neat little pamphlet, one page being devoted to each letter. The price of the pamphlet is five cents, and any number of copies desired may be obtained at that rate by addressing Professor J. C. Gordon, Kendall Green, Washington, D. C.

Dr. T. H. Gallaudet's Portrait.—The engraving of Dr. T. H. Gallaudet given in the present number of the *Annals*, which President Gallaudet pronounces the best portrait of his father yet published, is reprinted by permission from Mr. Syle's "Retrospect of the Education of the Deaf," published by Wm. R. Cullingworth, Philadelphia. The autograph accompanying it is from a letter addressed by Dr. Gallaudet to Dr. Mason F. Cogswell while he was in Paris in 1816.

E. A. F.

ADVERTISEMENTS.

Miss Emma Garrett will continue to give a portion of her time to the training of persons for articulation work, having received eight applications for such teachers since July, 1885.

Applicants must possess a correct ear and furnish reference as to their English education.

Miss Garrett's students are working for the deaf in schools, families, and institutions, as follows: One as principal of a private school at No. 7 Merrick street, Philadelphia; one as private teacher in Philadelphia; one in the West Virginia Institution, Romney, West Va.; one in the Alabama Institution, Talladega, Ala.; one in the Pennsylvania Institution for the Deaf, Philadelphia; six in the Oral Branch of the Pennsylvania Institution, Philadelphia—one of these as "special articulation" teacher; one in the Tennessee School for the Deaf, Knoxville, Tenn.; two in the Virginia Institution; two in the Le Couteulx St. Mary's Institution, Buffalo, N. Y.; one in the American Asylum for the Deaf, Hartford, Conn.; and one as private teacher in Wilmington, Del.

Address Miss Emma Garrett, Principal Pennsylvania Oral School for Deaf-Mutes, Scranton, Pa.

Miss R. L. Parker, of Philadelphia, is being trained in the theory and practice of the oral and aural method by Miss Emma Garrett, and will complete her course July 1, after which time she desires to obtain a position in a private family, school, or institution. Miss Parker holds a Regent's Certificate of the State of New York, showing her proficiency in the ordinary English branches. Address Miss R. L. Parker, 227 Adams avenue, Scranton, Pa., or Miss Emma Garrett, 306 Jefferson avenue, Scranton, Pa.

A teacher of successful experience in a hearing school is being trained in the theory and practice of the oral and aural method, by Miss Emma Garrett, and will complete her course July 1, after which time she desires to obtain a position in a private family, school, or institution. Address Miss Viola Taylor, 1695 Church avenue, Scranton, Pa., or Miss Emma Garrett, 306 Jefferson avenue, Scranton, Pa.

An articulation teacher desires a position in a school, or private scholars. Address Miss M. Conway, 2228 Bainbridge st., Philadelphia, Pa.

An experienced teacher desires a position as teacher of articulation. Address Miss Josie Fish, Haddonfield, New Jersey.

Jefferson Institute, Fine Art and Design.—This school gives a thorough training and complete education in the fine arts, industrial, and decorative. There is a special class for deaf-mutes; also a training class for deaf-mute teachers intending to teach industrial art in deaf-mute institutions. Good homes provided for out-of-town pupils. Also, lessons by mail. The superintendent is a semi-mute lady. For further particulars address Miss Agnes M. Burney, Superintendent, Jefferson, Ohio.

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